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Zink, R.M.
1978 - 1982
Catalogue
#640 - #2108

Calif. 78-79

Calif. } 1980
Nevada }
Paraguay }

Illinois
Calif. 1981
Oklahoma
Minnesota

Calif.
Oklahoma 1982
Montana
Idaho

Robert M. Zink
1978

Catalog

RMZ #'s 1-639 in catalog at Univ. of Minnesota, J.F. Bell Mus. Nat. Hist, 10 Church St. S.E. Mpls, Minn. 55455
290 Camino del Mar, Inverness, Marin Co., California
28 Nov. 1977

165825 640 ^{Ad} ♀ *Aphelocoma coerulescens* lt. fat, O.-6x3mm (ovac 1mm), no wt. taken
7 Jan. 1978

165816 641 ♀ *Ixoreus naevius* lt. fat, O.-7x3mm (not granular), 84.0g
15 mi. SW of Sonoma on Hwy 108/220, Tuolumne Co., California
27 May 1978

165823 642 ♂ by plow. *Icterus galbula bullocki* lt. fat, gonads not found, no wt. taken
(badly dehydrated), sk. oss., no molt DOR
Stanislaus National Forest 20 mi. E Tuolumne, Tuolumne Co., California
-use 1 1/2 mi. N, 2 mi. W Woods Ridge L.O. 4800 ft, Tuolumne Co., Calif., [T. 2N, R. 18E, sec. 33]
28 May

165821 643 ♂ *Western Tanager* Stom.-insect remains (Coleoptera) sk. oss., lt. fat
Coll. from lgc. conifer Liver, heart, kidney + muscle, T.=10x5mm 27.7g
165822 644 ♂ *Warbling Vireo* T.=7x4mm Stom.-Coleoptera, other insects 11.6g
Stanislaus National Forest 5100' Tuolumne Co., California, Cottonwood Rd., 26 mi. E of Tuolumne (2 mi. N Woods Ridge L.O.)
T. 2N, R. 18E, sec. 35
28 May 1978

5942 645 ♂ *Passerella iliaca* T.=8x5mm, sk. oss., no wt, lt. fat

65943 646 ♀ " " well developed broad patch, mod. fat ~~34.6g~~
34.6g O.-10x5mm (largest ovum=2mm)

165944 647 ♂ " " lt. fat, cloacal protub., no molt
30.0g, T.L.=177mm, ex.-255mm, T=9x5mm,

165945 648 ♂ " " no molt
33.5g, T.L.=185, ex.-270, T.-9x5mm, lt. fat
5000'
1 1/2 mi. N, 2 mi. E Woods Ridge L.O., ~4800 ft. Tuolumne Co., Calif. [T. 2N, R. 19E sec. 31]

5817 pair { 649 ♀ *Mountain Chickadee* 13.3g, O.=7x4mm (largest ovum=2mm) broad patch
stom.-insect remains
650 ♂ " " sk. oss.
13.4, T=10x5, stom.-insect remains

165818

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^{3400ft}
1/4 mi. E Bass Lake, Madera Co. California, T. 7S, R. 22E, SW 1/4 Sec. 15

651

20 June 1978

♂ ^{DOB} Rufous-sided Towhee, 42.7g, T. = 12x7mm, ^{heart, liver, breast muscle} 1t. fat, sk. ass. (no kidney) (fruit pits) ^{6600'} Stom. - insects + seeds

Sierra Nat. Forest, 1/2 mi. N, 1 mi. E Jackass Rock, Madera Co., California, T. 7S, R. 25E, sec. 34

21 June 1978

652

♀

Passerella iliaca

coll. 0830, well devel. brood patch, 1t. ~~fat~~ fat, sk. ass. ^{no molt}

39.9g, O. - 10x6mm (formed egg in oviduct)

653

♂

"

bird was giving broken wing display when coll. - juv. + mate nearby

32.1g, T. = 10x6mm, cloacal protub., 1t. fat, sk. ass, ^{no molt}

654

♂

"

"

Singing in 3m Fir

33.4g, T. = 9x6mm, cloacal prot., 1t. fat, sk. ass, no molt

655

♀

"

"

mod. brood patch, 1t. ~~mod.~~ fat, sk. ass, no molt

31.1g, O. - 9x5mm (largest ovum 2mm)

656

♂

"

"

no molt

34.4, T. = 11x7mm, cloacal protub., sk. ass, 1t. fat

skeleton only

657

♂

"

"

Skeleton T = 9x5mm

31.3g, w = 84mm, t = 90-91mm, ex = 270mm, TL = 184mm

658

♂

"

"

32.5g, T. = 8x5mm, cloacal prot., sk. ass, 1t. fat, no molt

659

Juv.

"

"

calling loudly when coll.

21.4g, gonads ^{posterior} not found (♀?), 1t. fat, sk. unass, 1t. molt

660

♀

"

"

mod. brood patch, 1t. mod. fat, sk. ass., no molt

35.7g, O. - 14x6 (largest ovum = 5mm)

661

♂

"

"

singing when coll., near top 10' fir

34.8g, T. = 9x4mm, cloacal protub., sk. ass, 1t. fat, no molt

22 June

662

Juv. ♀

"

"

stom. - essentially empty - Cdeoptera remains

18.7g, O. - 2x1mm, sk. unass, 1t. mod. fat

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Sierra National Forest, 1 mi. N, 1 mi. E Jackass Rock, Madera Co, California
T. 6S, R. 25E, sec. 34 6600'

22 June 1978

663 ♂ *Passerella iliaca* 31.7g, T. = 10x7mm; sk. oss, no molt, lt. fat
cloacal protub.

664 ♂ " " 32.2g, T. = $\begin{cases} SL = 12 \times 9 \text{ mm} \\ R = 4 \times 2.5 \text{ mm} \end{cases}$, no molt, sk. oss, lt. fat
cloacal protub.

prob. mature { 665 ♀ " " well devel. brood patch, lt. fat, sk. oss, no molt
32.6g, O. = 10x6mm (largest ovum = 3mm)

666 ♂ " " 33.3g, T. = 9x6mm; cloacal prot., sk. oss, lt. fat, no molt

165815 667 ♀ *Empidonax oberholseri* skull oss, brood patch, lt. fat
14.2g, O. - exam. (largest ovum 2.6mm)
was coll. at nest. Nest 2' near top of a manzanita, 2 plain, whitish eggs.

Sierra Nat. Forest, Madera Co, California, 1 mi. E Jackass Rock, 6600'
T. 6S, R. 25E, sec. 6

23 June

668 ♂ *Passerella iliaca* 31.5g, T. = 9x5mm; cloacal protub., sk. oss, no molt, lt. fat

669 ♂ " " 33.2g, T. = 11x8mm; cloacal protub., sk. oss, lt. fat
no molt

670 ♂ " " 32.1g, T. = 8x5mm; cloacal protub., sk. oss, lt. fat
no molt

671 ♀ " skeleton only 28.5g, w = 81mm, t = 83-84mm, O. = 10x5mm (largest ovum 3mm)
well devel. brood patch, ex. = 263mm TL = 188, no molt
lt. med. fat, sk. oss

672 ♂ " skeleton only 31.0g, T. = 10x5mm, sk. oss, cloacal protub., lt. fat
w = 80mm, t = too frayed, ex = 265mm

673 ♂ " " 32.9g, T. = 10x5mm; cloacal protub., sk. oss, lt. fat
no molt

674 Juv. ♀? " " 25.7g, sk. unoss, lt. fat [should be same local as Raz 666]

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Sierra National Forest, Madera Co., California, 1 mi. E Jackass Rock
T. 6S, R. 25E, sec. 6 6600'

23 June

675 ♂ *Passerella iliaca* no molt. 33.9g, T. = 10x6mm, cloacal protub., lt. fat, sk. oos

676 ♀ " " well devel. brood patch - near fledgling (!), sk. oos
35.8g, O. = 15x10mm, formed egg (12x10mm) in oviduct, lt. fat
no molt

677 ♂ " " was giving broken wing display when collected
31.1g, T. = 7x4mm, sk. oos, lt. fat, no molt, cloacal protub.

678 ♂ " " sk. oos
33.9g, T. = 10x7mm, cloacal prot., lt. fat, no molt

25 June 6 mi. N, 1 mi. W, Mushroom Rock T. 7S, R. 24E, sec. 24
Sierra National Forest, Fresno Co., California 4900'

679 ♂ " " coll. on ground in dense 5-6' ~~*Gnaphalium* - manzanita~~
32.3g, T. = 10x5mm, lt. fat, sk. oos, no molt
coll. in pine along stream bordering manzanita - *Ceanothus*; calling

680 ♂ " " coll. on ground in dense *Gnaphalium* - manzanita (5-6')
33.0g, T. = 11x6mm, no molt, lt. fat, sk. oos,
2 mi. S, 1 mi. E Mt. Tom 7300'

Sierra Nat. Forest, Fresno Co., California, T. 7S, R. 26E, sec. 5

25 June

carrying food in bill, Brood patch, lt. fat.

681 ♀ *Passerella iliaca* 31.1g, O. = 8x4mm (largest ovum = 2mm), sk. oos, no molt,
coll. in conifer bordering manzanita

682 ♂ " " coll. in ~~small~~ 25' conifer bordering manzanita
35.6g, T. = 10x7mm, sk. oos, lt. fat, no molt

683 ♀ " " w = 8mm, t = 8mm. Brood patch,
30.4g, O. = 7x4mm (largest ovum = 1.5mm)

684 ♂ " " coll. in small (15') conifer bordering manzanita
35.4g, T. = 9x6mm, sk. oos, lt. fat, no molt
w = 8.4mm, t = 8.5mm,

685 ♂ " " cloacal protub.
33.8g, T. = 9x6mm, sk. oos, lt. fat, no molt

686 ♂ " " cloacal protub.
34.8g, T. = 11x5mm, sk. oos, lt. fat, no molt.

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2 mi. S, 1 mi. E Mt. Tom, 7300'
Sierra Nat. Forest, Fresno Co., California, T. 7S, R. 26E, sec. 5

26 June

26 June

687 ♂ *Passerella iliaca* singing cloacal protub. 35.9g, T=12x6mm, sk. oss, lt. fat, no molt

singing from 5' conifer in manzanita patch

prob. mated { 688 ♂ " " 34.0g, T=10x5mm, sk. oss, lt. fat, no molt, cloacal prot.

coll. on bare ground between patches of manzanita mod. brood patch

689 ♀ " " 31.8g, O=8x4mm (largest ovum=1mm), lt. fat, sk. oss

coll. in manzanita, brood patch, lt. fat, no molt

690 ♀ " " 30.9g, O=9x6mm (largest ovum=2mm), sk. oss.

coll. in manzanita. Brood patch, ~~no~~ fat. lt. fat

691 ♀ " " 33.0g, O=7x4mm (largest ovum=1mm), sk. oss, no molt

coll. in conifer over road adjacent to manzanita patch; responded to squeaking 34.5g, T=10x5mm, sk. oss, lt. fat, no molt, cloacal protub.

1 mi. E Mt. Tom 7400'

Sierra Nat. Forest, Fresno Co., California, T. 6S, R. 26E, SW 1/4 sec. 29

26 June

singing from 10' conifer in manzanita (w/ open ground + rocks)

prob. mated { 693 ♂ *Passerella iliaca* 35.9g, T=11x9mm, sk. oss, lt. fat, no molt, cloacal protub.

694 ♀ skeleton only coll. in dense manzanita, well devel. brood patch 37.1g, W=79mm, t=51-82mm, O=10x5mm (largest ovum=2mm)

singing from conifer at edge of manzanita, cloacal protub.

695 ♂ " " 31.4g, T=10x5mm, sk. oss, lt. fat, no molt

2.5 mi. W, 1/2 mi. S, Bald Mt., 8400', T. 10S, R. 25E, NW 1/4 sec. 4

Sierra Nat. Forest, Fresno Co., California

28 June

coll. in dense ~~ceanothos~~ shrub, cloacal protub.

696 ♂ *Passerella iliaca*, 30.0g, T=10x5mm, sk. oss, no molt, lt. fat,

coll. in 20' cedar bordering dense forest, shrub, 32.1g, molt tail, immature primaries, sk. oss, lt. fat

697 ? " " - singing? only gonad-like structure appeared to be an undeveloped ovary, but no apparent brood patch



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2.5 mi. W, 0.5 mi. S Bald Mt., 5400', T. 105, R. 25E, N¹/₄ Sec. 4

Sierra Nat. Forest, Fresno Co, California

28 June (cont).

698

♂

^{skeleton only}
Passerella iliaca

coll. in manzanita - Ceanothus

38.2g, W=83mm, t=84mm, T₁=9x5mm.

699

♂

"

"

coll. in manzanita - Ceanothus

38.5g, T₁=10x5mm, sk.oss, lt. fat, no molt

700

♂

"

"

coll. in dense 3' Ceanothus

32.8g, T₁=8x4mm, sk.oss, lt. fat, no molt, cloacal protub.

701

♀

"

"

coll. in dense Ceanothus patch, was near 1 or 2 fledglings
32.3g, O=8x3mm (ova ≤ 1mm), sk.oss, no molt
Brood patch, lt. fat

29 June

702

♂

"

"

singing, 10' in 40' spruce edge of Ceanothus + manzanita

35.0g, T₁=10x6mm, sk.oss, lt. fat, no molt, cloacal protub.

703

♀

"

"

coll. in dense 2-3' Ceanothus, lt. fat, Brood patch

33.7g, O=9x6mm (largest ovum = 2mm), sk.oss, no molt

704

♂

"

"

coll. top of 15' Cedar in Ceanothus

35.9g, T₁=11x5mm, sk.oss, lt. fat, no molt, cloacal protub.
ectoparasites taken from cotton around rock on 2 July 78 (some alive)

705

♂

"

"

singing in 30' pine in open area w/ scattered brush

32.7g, T₁=11x7mm, sk.oss, lt. fat, no molt, cloacal protub.
ectoparasites taken from cotton around rock on 2 July 78 (some alive)

706

♂

"

"

singing in 30' pine (10' from ground), near brush patch

37.7g, T₁=10x5mm, sk.oss, lt. fat, no molt, cloacal protub.

707

♂

"

"

coll. in 6' pine at edge of Ceanothus, no molt

37.0g, T₁=10x6mm, sk.oss, lt. fat, cloacal protub.

708

♂

"

"

coll. singing 20' in pine at edge of dense 3' Ceanothus

38.1g, T₁=9x5mm, sk.oss, no molt, lt. fat, cloacal protub.

709

♂

"

"

coll. dense 3' Ceanothus

37.3g, T₁=8x4mm, sk.oss, lt. fat, no molt, cloacal protub.

710

♀

"

"

coll. in dense 3' Ceanothus, sk.oss, lt. fat, no molt

36.5g, Brood patch, O=10x4mm (largest ovum = 6mm)

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(2.5 mi. W, 0.5 mi. S Bald Mt, 5400')

Sierra National Forest, Fresno Co., California, 1 mi. S
Shaver Lake, T. 10S, R. 2SE, N $\frac{1}{8}$ sec. 4

30 June 1978

coll. in 4' manzanita w/ Ceanothus present. T. - exam

711 ♂ *Passerella iliaca* 33.3g, sk. oss, lt. fat, no molt, cloacal protub.

coll. on dead branch of pine in fairly dense manzanita - Ceanothus (3-4')

712 ♂ " " 35.2g, T. = 10x6mm, sk. oss, no molt, lt. fat, cloacal protub.

coll. in dense 3-4' manzanita - Ceanothus, w = 78-79

prob. noted pair
713 ♀ skeleton only

35.9g, brood patch, formed egg in oviduct.
t = 81-82mm, w = 68 (to outer 10)

singing, 15' in 60' pine - over dense 3-4' manzanita

714 ♂ skeleton only

31.3g, T. = 11x7mm, w. = 82-83mm, w - outer 10 = 73
t = ~82mm, plumage very worn

singing 10' in 30' oak in oak-pine spruce + manzanita woodland.

715 ♂ " "

33.6g, T. = 9x5mm, sk. oss, lt. fat, no molt, cloacal protub.

coll. in 3' manzanita, in fairly open manzanita - Ceanothus brush field.

716 ♂ " "

31.9g, T. = 10x5mm, sk. oss, lt. fat, no molt, cloacal protub.

coll. 15' in 30' cedar over dense 2-3' Ceanothus, sk. oss,

717 ♀ " "

32.0g, O. = 7x4mm (largest ovum = 1.5mm), brood patch, lt. fat
no molt

coll. 4' in 12' (Sugar?) Pine over 2-3' dense Ceanothus

718 ♂ " "

35.9g, T. = 9x5mm, sk. oss, lt. fat, no molt, cloacal
protub.

Tuolumne Co., California

Stanislaus Nat. Forest, 2 mi. N Woods Ridge L.O. 5100', T. 2N, R. 18E, sec. 35

9 July

molt 1 secondary, coll. dense 4-6' brush (Ceanothus?)

719 ♀ *Passerella iliaca* 32.0g O. = 7x4mm (largest ovum = 1mm), lt. fat

molt inner primaries, O. - exam. ova ≤ 1.5 mm. coll. dense 4-6' brush

720 ♀ skeleton only 33.8g, w = 80, wing - outer 10 = 70, t = 89mm,

coll. dense brush 4-6'

721 Juv. ♀

28.9g, O. = 3x2mm (not granular), sk. unoss, lt. fat

722 Juv. ♂

coll. 31.1g, T. exam, lt. fat

R. M. Zink

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Stanslaus Nat. Forest, 2 mi. W Woods Ridge L.E., Tuolumne Co., Calif.
5100', T. 2N, R. 18E, sec. 35

9 July

723 ♀ *Passerella iliaca* 31.9g, sk. oss, ~~lt. fat~~ O.-exam.

724 ♀ skeleton only, 31.9g coll. in 5' bush in ^(sp.?) *Ceanothus*-*manzanita*, O.-co. 8x4 (largest ovum 2mm)
bird had no tail when coll. wing - 78mm, tail - X
wing-outlet - 68

10 July

725 Juv. ♀? " " 31.7g, O.-?, mod. fat
coll. in dead tree in mod. heavy ^{2-4'} *Ceanothus* *manzanita*

726 ♂ " " 33.9g, T. = 7x4mm, sk. oss, lt. fat, cloacal protub.
singing from dead 25' tree over dense 4-6' brush

727 ♂ *Passerella iliaca* 33.7g, cloacal protub. (molt? -
1.5 mi. E Big Meadow, 6600', Tuolumne Co. California, T. 7N, R. 17E, sec. 34
coll. mod. dense *Ceanothus*

11 July

728 ♂ *Passerella iliaca* 32.0g, T. = 8x4mm, sk. oss, lt. fat, no molt, cloacal protub.
2.0 mi W, 1.0 mi. N, Sapp's Hill, Tuolumne Co. California, 6200', T. 7N, R. 17E, sec. 25
coll. rocky area w/ *Ceanothus* (3-4')

729 ♀ " " 28.3g, O. = 6x3mm (largest ova 1mm), sk. oss, lt. fat
coll. rocky area w/ *Ceanothus* (3-4')
mod. broad patch (not vascularized)

730 ♂ " " 34.0g, T. = 3x1.5mm, sk. oss, lt. fat, no molt, cloacal protub.
singing (in response to "pishing"), coll. in *Ceanothus* (3-4')

731 ♂ " " 34.7g, T. = 10x5mm, sk. oss, lt. fat, cloacal protub., no molt
coll. in *Ceanothus* (3-4')

732 ♂ " " 34.0g, T. = 10x6mm, sk. oss, lt. fat, no molt, cloacal protub.
coll. in 3-4' *Ceanothus*

733 Juv. ♀ " " 28.0g, O.-exam
coll. in 3' *Ceanothus*

734 ♂ skeleton only 32.5g, wing - 81mm, T. = 9x5mm.
wing-outlet - 73mm, tail - 81mm

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^W
2.0 mi. ~~W~~ 1.0 mi. N Sags Hill, Tuolumne Co, California, 6200' T. 7N, R. 17E, sec. 25 ^{W 1/2 of}

11 July

735 ♂ ^(by lack of brood patch) *Passerella iliaca* 30.8g, T. 9mm, lt. fat ^{molt inner 1°}

3.5 mi. W Sags Hill, Tuolumne Co, California, 6400' T. 7N, R. 17E, S 1/2 sec. 34

12 July

736 ♀ *Passerella iliaca* 30.3g, O. 9x4mm (largest ovum = 2mm), sk. os, lt. fat ^{coll. in fairly dense 3-4' ceanothus, mod. brood patch, no molt}

737 ♂

" " Singing 15' in 70' spruce in mixed conifer - scrub
32.2g, T. = 9x4mm, sk. os, lt. fat, no molt, ^{mod. cloacal protub.}

738 ♂

" " coll. in area of road + mixed ceanothus + conifer - singing in 20' spruce
32.7g, T. = 10x5mm, sk. os, lt. fat, no molt ^{mod. cloacal protub.}

739 ♂

" " coll. in mixed ceanothus + conifer on ground
33.8g, T. = 8x5mm, sk. os, lt. fat, no molt,

740 ♂

3.0 mi. W, 1.0 mi. N Sags Hill, 6500', Tuolumne Co, California T. 7N, R. 17E, ^{SW 1/4 sec 26}
lt. fat, mod. cloacal protub.
30.0g, T. = 9x5mm, sk. os, lt. fat, molt middle 2 secondaries
coll. on bare ground under conifer in mixed conifer - scrub

740 ♀

skelton only 31.4g, wing - 75mm, well devel. brood patch
wing outer 1° = 67mm, 2° = 74mm, tail = 76-77mm, coll. in ceanothus

13 July

742 ♂

skelton only singing on lg. granite rock in fairly open ceanothus - growth brushfield
Passerella iliaca 31.5g, wings ⁸⁴⁻ 85, wing - outer 1° = 75, tail = 86mm, T = 8x4mm

743 ♀

" " coll. in 3' ceanothus, mod. brood patch
30.9g, O. = 10x5mm (largest ovum = 2mm), sk. os, lt. fat, no molt

744 ♂

" " coll. in 3-4' ceanothus
33.2g, T. = 8x4mm, sk. os, lt. fat, ^{mod.} cloacal protub., no molt

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SW 1/4 Sec.

1 1/2 mi. N, 1 mi. E, Barker PK, 12000 ft. Placer Co, California, T. 15 N, R. 16 E, 33

13 July

745 ♂ *Passerella iliaca* 33.2g, T. = 12x5mm, sk. os, lt. fat, closed protub.
no molt, coll. in brushy area, w/ two juvenes

746 ♂ " skeleton only" 31.6g, coll. in conifer over brush
Wing - 84mm
Wing outer 1° - 74mm
tail - 88mm

14 July

747 ♂ *Passerella iliaca* 32.6g, T. = 8x7mm, sk. os, lt. fat, med. cloacal protub.
coll. in 8' shrub, str. 40' conifer bordering brush, apparently in territory of another ♂

4 mi. E Ward Peak, Placer Co., California, 6500'-6700', T. 15 N, R. 16 E, NE 1/4 sec. 14

748 ♂ *Passerella iliaca* 33.0g, T. = 8x5mm, sk. os, lt. fat, no molt
coll. in 2'-3' *Ceanothus* close to fence.

749 ♂ " " 30.0g, T. exam, lt. fat
coll. in 2'-3' *Ceanothus*

750 ♀ " " 32.0g, O. = 10x5mm (largest ovum = 2mm), sk. os, lt. fat, reg. brood patch (no molt?)
coll. on ground in 1' *Ceanothus*

751 ♂ " " 35.0g, T. = 10x5mm, sk. os, lt. fat, no molt
mod. cloacal protub.

752 ♀ skeleton only" 29.5g, coll. on ground in 1'-2' *Ceanothus*
Wing - 78mm
Wing outer 1° - 67, med. brood patch
tail - 81mm, O. - exam (ova small)

15 July

753 ♂ " " 31.6g, T. = 10x5mm, sk. os, lt. fat, no molt, med. cloacal protub.
coll. on ground in fairly open 1' *Ceanothus*

754 ♂ " " 31.6g, T. = 9x5mm, sk. os, lt. fat, no molt, med. cloacal protub.
coll. on ground 2'-3' *Ceanothus*

755 ♀ skeleton only" 32.5g, coll. 2' *Ceanothus*, O. = 6x3mm (largest ovum = 1.5mm)
Wing - 80mm
Wing outer 1° - 73mm
tail ~ 80mm
no molt, mod. brood patch

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NE 1/4 sec. 14

4 mi. E Ward Peak, 6500-6700, Placer Co. California, T. 15 N, R. 16 E,

15 July

coll. fairly open 3'-4' Ceanothus, cloacal protub.

- notes { 756 ♂ *Passercella iliaca* 32.0g, T. = 8x4mm, sk. ♂, lt. fat, normal
- 757 ♀ " " 29.6g, O. = 7x3mm (ova ≤ 1mm), sk. ♂, lt. fat, normal

coll. fairly open 3'-4' Ceanothus, mod. brood patch (not vascularized)

- 758 ♂ " " 31.9g, T. = 10x5mm, sk. ♂, lt. fat, normal, mod. cloacal protub.

- 759 ♂ (by lock of brood patch) " " 34.5g, T. = exam, lt. fat

- 760 ♂ " " 31.1g, T. = 7x5mm, sk. ♂, lt. fat, normal, coll. in 2' Ceanothus, mod. cloacal protub.

- 761 ♀ skeleton only " " 28.5g, no tail (part of (retix) mod. brood patch, O. = 8x4mm (largest ova = 2mm), 16 July, coll. on ground in 1' Ceanothus, wings - 77mm, wing outer 10-69-70mm

- 762 ♂ " " 30.0g, sk. ♂, lt. fat, T. = 8x5mm, mod. cloacal protub., most outer 2° left wing coll. on ground in Ceanothus

- 763 ♂ " " 33.7g, T. = 10x5mm, sk. ♂, lt. fat, normal, coll. in manzanita, mod. cloacal protub.

- 764 ♀ " " 30.0g, O. = 6x4mm (ova ≤ 1mm), sk. ♂, lt. fat, normal, mod. brood patch, coll. in manzanita, mod. cloacal protub.

- 765 ♂ " " no wt, T. = 10x5mm, sk. ♂, lt. fat, normal, cloacal prot. (mod), coll. in small (8') spruce in Ceanothus

- 766 ♂ " " no wt, T. = 8x5mm, sk. ♂, lt. fat, mod. cloacal protub., coll. in 2-3' Ceanothus

- 767 ♂ " " 31.5g, T. = 7x4.5mm, sk. ♂, lt. fat, normal, cloacal protub., coll. edge fairly dense brush + pine-stem (mod.)

R.M. Zink
1978

Catalog

~~768~~ Sage Meadows, 6700', Placer Co, California T. 15 N, R. 16 E, NE $\frac{1}{4}$ sec. 15
tissue only coll. grassy meadow near small stream
768 ♀ Spotted Sandpiper 42.2g,

T. 19 N, R. 16 E, S $\frac{1}{2}$ sec. 33
Sagehen Hills, $1\frac{1}{2}$ mi. N, $1\frac{1}{2}$ mi. W Billy Hill, 6300 ft., Nevada Co, California

17 July

coll. ~~Ceanothus~~ - manzanita, mod. cloacal protub.

769 ♂ *Passerella iliaca* 30.0g, T. = 4×2.5 mm, sk. ova, lt. fat, no molt

770 ♂ skeleton only, molt-back mod. cloacal protub.
no wt. T. = 5×4 mm, sk. ova, lt. fat, ~~no molt~~
wing 83, wing outch 107, tail - molt

771 ♂ " " mod. cloacal protub., molt inner primaries
32.0g, T. = 9×5 mm, sk. ova, lt. fat

772 ♂ " skeleton only wing - worn
35.0g, wing outer 10 - 82, tail - worn, T. = 12×7 mm, no molt, lt. fat

18 July

773 ♀ " " mod. broad patch, no molt
31.5g, O. = 8×4 mm (largest ovum = 1.5 mm), sk. ova, lt. fat

774 ♂ " " molt inner 10 (s?) left wing, lt. mod. cloacal protub.
33.5g, T. = 2×1 mm, sk. ova, lt. fat,

775 ♂ " " mod. cloacal protub.
30.0g, T. = 7×4 mm, sk. ova, lt. fat

776 ♂ " " mod. cloacal protub.
30.0g, T. = 10×5 mm, sk. ova, lt. fat
SE $\frac{1}{4}$

T. 19 N, R. 16 E, S $\frac{1}{2}$ sec. 32
Sagehen Hills, $1\frac{1}{2}$ mi. N, $1\frac{1}{2}$ mi. W Billy Hill, 6300 ft., Nevada Co, Calif.

777 ♂ " " 2.0
33.7g, T. = 9×5 mm, sk. ova, lt. fat, no molt, mod. cloacal protub.

778 ♂ " " 33.9g, T. = 5×3 mm, sk. ova, lt. fat, mod. cloacal protub.

779 ♂ " " mod. cloacal protub.
30.3g, T. = $\begin{cases} L = 10 \times 6 \\ R = 5 \times 3 \end{cases}$ mm, sk. ova, lt. fat, no molt

R.M. Zink
1978

Catalog

T. 19N, R. 16E, SE $\frac{1}{4}$ sec. 32

Sagehen Hills, $1\frac{1}{2}$ mi. W, 2.0 mi. W Billy Hill, 6300', Nevada Co., California

7

18 July

780 ^{Juv.} ♂ *Passerella iliaca* 30.0g, T. = 1mm, sk. unoss., lt. fat,

Sagehen Hills, $1\frac{1}{2}$ mi. W, $1\frac{1}{2}$ mi. W Billy Hill, 6300'-6400', Nevada Co., California, T. 19N, R. 16E, S $\frac{1}{2}$ sec. 33

781 ♂ *Passerella iliaca* 32.2g, T. = 7x4mm, sk. oss., lt. fat, no molt, mod. closed protub.

782 ♀ " " 30.4g, ^{lt. fat} brood patch found, brood patch

783 ♂ " " 30.0g, T. = 4x2.5mm, ^{mod. closed protub.} sk. oss., lt. fat

784 ♀ " " 31.4g, ^{lt. fat, no molt, lt. brood patch} O. = 4x2.5mm (ova barely visible), sk. oss.,

785 ♂ " " ^{prob. parent of 786} 29.1g, T. = 2.5x1.0mm, sk. oss., lt. fat, mod. closed protub.

786 ^{Juv.} ♀ " " 26.6g, ^{body molt} O. = 2x1mm (not granular), lt. fat, ^{prob. offspring of 785}

20 July

787 ^{Juv.} ? (♀?) " " 29.1g, O. = ?, lt. fat

788 ♀ " " ^{mod. brood patch} 30.6g, O. = 4x3mm (ova not obvious), sk. oss., lt. fat.

789 ♂ " " ^{molt: inner primaries, back, upper tail coverts} 32.2g, T. = 3x1.5mm, sk. oss., lt. fat, mod. closed protub.

145819 790 ^{Juv.} ? (♀?) Green-tailed Towhee 28.7g, O. = ?, lt. fat

R.M. Zink
1978

Catalog

T. 24N, R. 8E, NW 1/4 sec. 32

2 mi. S, 1/2 mi. E Spanish Pk., 5300'-5800', Plumas Co, California

21 July

791 ♂ *Passerella iliaca* 34.4g, T. - {L-5x3 / R-8x5} mm, ^{no molt, red cloacal protub.} sk., ^{little} mod. fat

22 July

792 ♂ *Passerella iliaca* no wt. T. - 6x3mm, ^{no molt, red cloacal protub.} sk., ^{little} mod. fat,

793 ^{Juv.} ♂ " " 29.2g, T = 1mm, sk. unass., ^{little} mod. fat, little body molt

794 ♂ " skeleton only " 30.0g, ^{wing 81-82, wing outer 10-75, tail - 87} head & bill shot destroyed, T. - 5x3mm, ^{mod. fat} sk., ^{mod. fat} mod. fat

795 ♂ " " 35.3g, T. = 8x5mm, ^{molt inner 10's} sk., ^{mod. fat} mod. fat, ^{red cloacal protub.} red cloacal protub.

796 ♀ " skeleton only " 31.2g, ^{mod. fat} mod. fat, ^{old brood patch} old brood patch, O. - 4x2.5mm (ova < 1mm), ^{wing outer 10-69} wing outer 10-69

797 ♂ " " 32.5g, T. = 3x2mm, ^{mod. fat} mod. fat, ^{red cloacal protub.} red cloacal protub., back, sk. ^{mod. fat} mod. fat

798 ♀ " " 28.2g, O. - 4x3mm (ova < 1mm), ^{mod. fat} mod. fat, ^{gut cavity w/ many long white worms (dia = 0)} gut cavity w/ many long white worms (dia = 0)

799 ♂ " " 33.4g, T. - 4.5x2.5mm, ^{molt inner primaries, back} sk., ^{mod. fat} mod. fat, ^{red cloacal protub.} red cloacal protub.

800 ♂ " " 34.4g, T. - 6x3mm, ^{mod. fat} mod. fat, ^{no molt} no molt, sk. ^{mod. fat} mod. fat

801 ♀ " skeleton only Green-tailed Towhee 24.9g, ^{wing - 75mm, tail - 79mm}

23 July

802 ♂ *Passerella iliaca* ^{skeleton only} ^{molt inner} ^{no wt} 10 wt, ^{wing - 80-81mm, wing outer 10-72, tail - molt} wing - 80-81mm, wing outer 10-72, tail - molt, ^{T. - 4x2mm, mod. fat} T. - 4x2mm, mod. fat



R. M. Zink
1978

Catalog

2 1/2 mi. S, 1/2 mi. E Spanish Pk, 5300'-5500', Plumas Co., California, T. 24N, R. 8E,
NW 1/4 sec. 32

23 July

molt - inner 10's, 20's, back

803 ♂ *Passerella iliaca* 34.6g, T-3x2mm, sk. os, lt. fat, lt. cloacal protuber.

804 ^{Juv.} ♂ " " 31.8g, T-1mm, lt. fat, sk. unoss

805 ♂ " " 32.7g, T-4x2mm, sk. os, ^{no molt} mod. cloacal protuber., lt. fat

806 ♂ " " 31.3g, T-3x2mm, ^{no molt} lt. fat, sk. os

6 1/2 mi. N, 7 mi. E Lassen Peak, 7600'-7800', Shasta Co., California
T. 32N, R. 5 E, SW 1/4 sec. 35

26 July

old brood patch, ^{light} molt - ventral + back

807 ♀ *Passerella iliaca* 32.3g, O-4x2mm (ovac) mm, sk. os, lt. fat

808 ♂ " " 31.4g, T-3.5x2.0mm, sk. os, ^{molt: back, lt. cloacal protuber.} lt. fat

809 ♂ " " 31.4g, ^{lt. cloacal protuber.} T-8x4mm, sk. os, lt. fat, no molt

810 ^{Juv.} ♀ " " 28.5g, O-2x1mm, sk. os, lt. fat, no molt

811 ♂ *Loxia curvirostris* 40.5g, T-5x3mm, sk. os, mod. fat, ^{seen flock of 7-10 in line (Montezuma)} no molt

812 ♂ *Passerella iliaca* 37.2g, T-3x2mm, sk. os, ^{lt. cloacal protuber., molt - ventral, back inner 10's} lt. fat

813 ♂ " " 33.6g, T-10x5mm, sk. os, ^{lt. cloacal protuber.} lt. fat, no molt

814 ♂ ^{skeleton only} " " 34.0g, T-5x2mm, ^{molt: inner 10's, 20's, tail, back, ventral} wing outer 10-11mm

R.M. Zink
1978

Catalog

T. 32N, R. 5E, SW 1/4 sec. 35
6 1/2 mi N, 7 mi E Lassen Peak, 7600', Shasta Co. Calif.

815 ♂ *Passerella iliaca* ^{mod. cloacal protub.} T. - ~~32mm~~ 22mm, st. os, lt. fat, no molt
prob. parent of RM 2816 & 817 5x3mm

816 Juv. ♂ " " ^{ggc yellow, iris dk. brown} 22.4g, T-1mm, st. bone, lt. fat

817 Juv. ♀ " " ^{iris dk. brown, ggc yellow} 21.2g O.-2x1mm, st. bone, lt. fat

27 July
818 ♀ ^{skeleton only} *Passerella iliaca* 30.6g, O.-4x2mm (ova < 1mm) ^{molt: inner 1°, tail, back, ventral; wing ~ 78mm wing outer 1° 89}

819 ♂ " " ^{molt: dorsal, ventral, inner 1°} 32.2g, T.-4x2mm, st. os, lt. fat, lt. cloacal protub.

820 ♂ " " ^{singing tag 3d pine} ^{lt. cloacal protub.} 32.8g, T.-8x4mm, st. os, lt. fat, no molt

821 ♂ " " ^{lt. cloacal protub.} 33.5g, T.-5x3mm, st. os, lt. fat, no molt

822 ♀ " " ^{molt: back} 32.9g, O.-5x3mm (ova < 1mm), lt. fat, ^{inactive 14g} ^{feet}

823 ♂ ^{skeleton only} " " 30.6g, T.-4x2mm, wing outer 1° - 75mm

824 ♂ " " ^{lt. cloacal protub.} 32.0g, T.-3x2mm, st. os, lt. fat, no molt

825 ♂ ^{skeleton only} " " ^{molt inner 1°} 32.9g, T.-10x8mm, wing outer 1° - 70mm

28 July
826 Juv. ♂ ^{skeleton only} " " 29.6g, T-1.0mm, ^{wing - 83mm} ^{wing outer 1° - 75mm} ^{tail - 84mm}

R.M. Zink
1978

Catalog

T. 32N, R. 5E, SW 1/4 sec. 35

6 1/2 mi. N, 7 mi. E Lassen Peak, 7600', Shasta Co., California

28 July

827 Juv. ♂ skeleton only *Passerella iliaca* 27.4g, T-1mm, wing-84mm, wing outer 10-76mm, tail-89mm

828 ♂ skeleton only, 32.5g, wing-73, wing outer 10-73, tail-worn, T-2x1mm, molt: inner 10, ventral, back

829 Juv. ♂ " " 30.7g, T-1.0mm, lt fat, sp. unov, body molt

830 ♂ " " 31.0g, T-6x4mm, no molt, lt. fat, sp. ov, lt. cloacal protub.

831 ♀ " " 33.4g, O-7x4mm (ova < 1mm), no molt, old blood patch, st. ov, lt. fat.

832 ♂ " " 32.0g, T-3x2mm, molt: center of ventral tract, back, inner 10(?), lt. cloacal protub., lt. fat, sp. ov, lt. cloacal protub.

833 ♂ skeleton only 32.6g, T-3x2mm, wing-80-91mm, wing outer 10-73mm, tail-worn, lt. fat, molt: inner 10, back

7 mi. N, 5 1/2 mi. E Lassen Peak, 5700ft., Shasta Co., California T. 32N, R. 5E, NE 1/4 sec. 33 + (NW 1/4 sec. 34)

29 July

834 ♂ *Passerella iliaca* 30.0g, T-3x1.5mm, st. ov, mod. fat, no molt, lt. cloacal protub.

835 ♂ skeleton only 31.6g, T-3.5x2mm, wing outer 10-71mm, lt. fat, molt: inner 10, back, ventral

836 ♂ " " 30.3g, molt: inner 10, no other molt, lt. fat, wing & tail to worn, T-2x1mm

837 ♀ " " 32.1g, wing-77mm, wing outer 10-69mm, tail-6, ova-4x2mm (ova < 1mm), no molt, lt. fat

838 ♂ " " 30.3g, T-2.5x1.5mm, st. ov, lt. fat, lt. cloacal protub.

R.M. Zink
1978

Catalog

NW 4 sec 34

2 mi. N, 5 1/2 mi. E Lassen Peak, 5700 ft., Shasta Co., California, T. 32 N, R. 5 E, NE 4 sec. 34

29 July

- 839 ♀ *Passerella iliaca* 38.2g, O.-5x3mm (ova < 1mm), ^{no molt} sp. on, old fat, ^{incl. brood patch}
- 840 Juv. ♂ " " 25.5g, T.-1mm, sp. on, body, wing & tail molt
- 841 ♀ " " skeleton only, wing - 0, wing outer 1° - 66.60mm, tail - 0, 30.5g, O.-4x2mm (ova < 1mm), ^{old brood patch} molt inner 2 1°s, tar - 22.86 (flat), tar - 21.0 last and in scale) ^{light molt on back}
- 842 ♀ " " skeleton only " " 29.0g, w - 75.5mm, wing outer 1° - 65.9mm, tail - X, ^{old brood patch} O. - 0.5mm.
- 843 Juv. ♀ " " (no trunk skel.) 27.0g, O. - 3x1.5mm (not follicular), H. fat,
- 844 ♂ " " 31.0g, T. - 3x2mm, ^{no molt lt. cloacal prot.} sp. on, old fat,
- 845 ♂ " " skeleton only w - 75.5mm, wing outer 1° - 66.40mm, H. fat 31.7g, T. - 2x1mm tail grayish, molt inner 1°s, (measured & tapered) tar - 22.95mm (best foot)
- 846 ♂ " " skeleton only w - 81.8, w outer 1° - 74.5mm, tail - X 34.8g, molt: tail, inner 1°s, body (dorsal & ventral)

T. 28 N, R. 11 W, NW 4 sec. 3

8 mi. N, 6 mi. W No. Yolla Bolly Mts, 4400' - 4800', Trinity Co., Calif.

30 July

- 847 Juv. ♂ *Passerella iliaca* 36.4g, ^{skeleton only} molt: tail, body, 2°s, T. - 1mm w - 77.4, w outer 1° - 68.85, tail - 79.9mm
- 848 ♂ " " molt: back, ventral tail, inner 1°s, wing & tail coverts, 36.8g, sp. on, old fat, H. cloacal protub. T. - 3x2mm
- 849 Juv. ♂ " " 34.0g, T. - 2mm, sp. on, old fat
- 850 ♂ " " molt: inner 1°s 36.4g, sp. on, old fat, T. - 2x1mm

R. M. Zink
1978

Catalog

ca. 4 mi. W Ono, Shasta Co, Calif.

30 July

8514

851

♀

Acorn Woodpecker

body molt, lt. fat

no ut. taken, O. - 6 x 3 (ova obscure)
DOR - oak woodland

T. 28 mm, R. 11 mm, NW 4 sec. 3

8 mi. N, 6 mi. W Nolla Dolly Mts., 4400' - 4800', Trinity Co, California

31 July

852

Juv.
♂

Passerella iliaca

30.8 g, T. - 1 mm, sk. unoss, lt. fat,

853

♂

" "

lt. molt back.

35.0 g, T. - 2.5 x 1.5 mm, sk. os, lt. fat,

854

Juv.
♀

" "

3 x 1.5 mm (clean)

36.0 g, O. - ~~exam~~, lt. fat, body molt, sk. unoss

855

Juv.
♂

" "

no trunk skel.

35.5 g, T. - exam, lt. fat, sk. unoss, body molt

856

Juv.
♀

skeleton only

W - 80.3 mm, W outer 10 - 70.65 mm

35.2 g, tail - 83.6 mm, Bill f.a.n. - 9.50 mm, tar. - 23.85 mm, O. - exam

857

♂

"

"

molt: inner 10, tail (?)

33.8 g, T. - 2.5 x 1.5 mm, sk. os, lt. fat,

858

♀

"

"

old brood patch, molt: body, wings, tail

36.5 g, O. - 5 x 3 mm (ova $\leq$ 1 mm), sk. os, lt. fat,

859

♀

skeleton only

molt: outer 10 or 20; tail, complete body

37.9 g, O. - 5 x 3 mm (ova $\leq$ 1 mm), lt. fat, old brood patch

860

♂

"

"

38.2 g, T. - 2 x 1 mm, sk. os, lt. fat

861

♀

"

"

35.0 g, O. - 4 x 2 mm (ova $\leq$ 1 mm), lt. fat, old brood patch

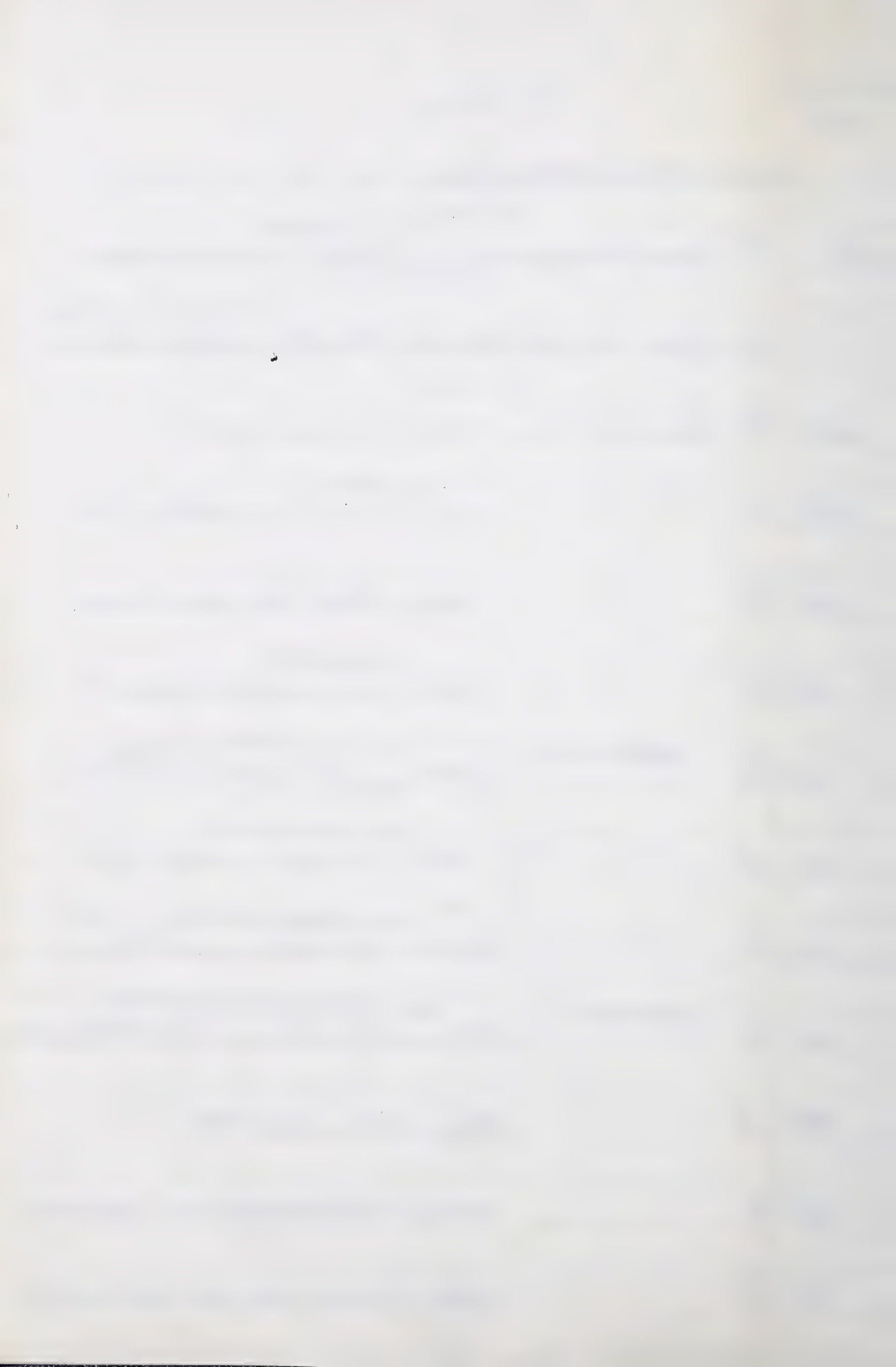
862

Juv.
♀

"

"

33.0 g, O. - 2 x 1 mm, lt. fat, molt: body, tail, sk. unoss



R. M. Zink
1978

Catalog

T. 28N, R. 11W, NW 1/4 sec. 3

8 mi. N, 6 mi. W of Yolla Bolly Mtn, 4400-4800', Trinity Co, California

31 July

863 ^{Juv.} ♂ Black-headed Grosbeak 45.0g, T. -1.5mm, Lt. fat, ^{4400 ft} body molt

2828 Grove Street, Berkeley, Alameda Co, California

864 ♀ Fork-tailed Storm Petrel 36.8gms, O. - ^{v. light fat, partially emaciated, no molt}

1 mi. S Shaver Lake 1 1/2 mi. S, 2 1/2 mi. W. Bald Mtn, 5400 ft.,

Fresno Co, California [T. 10S, R. 2SE, N 1/4 sec. 4]. (0191)

21 Sept.

skel. only

865 ♀ *Passerella iliaca* 34.0gms, ^{Heavy fat} ov-5x3mm (ova cln.)

866 ♀ " " 37.0gms, O, -4x2 (follicular)

867 ♂ " " 32.6gms, T. 1mm

868 ♂ " " 35.4gms.

869 *Scleropus occidentalis* - given to Steve Carr

1 1/4 mi. E Hwy Mtn, 2040m, Fresno Co, California [T. 9S, R. 2SE SE 1/4 sec. 9]

22 Sept

870 ♂ ^{cf. unalaschensis} *Passerella iliaca* 35.5g T. -1mm, Mod. fat, no molt

871 ♀ ^{bursa} "cf. unalaschensis" 25.7g, O, -exam, Lt. fat, no molt

872 ♂ "cf. megarhynchos" 31.0g ^{bursa} Lt. fat, no molt

11

11.11.11

R. M. Zink
1978

Catalog

1 1/4 mi. E Ely Mtn., 2040m, Fresno Co, California [T. 9S, R. 25E, SE 1/4 sec. 9]

22 Sept

skel. only
873

cf. megarhyncha
♂ *Passerella iliaca*

31.9g, ^{brn} T-1mm (wh. de), Lt. fat, molt: body.

"
874

♂

" cf. fulva "

35.3g ~~no~~ molt. T-1mm; body molt. R mod. fat

"
875

?

Zonotrichia leucophrys

mod. fat. No molt

29.2gms. Gonads not seen

1 mi S Shaver Lake, 1/2 mi S 2 1/2 mi W Bald Mtn. 5400ft, Fresno Co, Calif. [T. 10S, R. 25E, N 1/8 sec. 4]

skel. only
876

♂

Passerella iliaca

37.2g, T-1mm, mod fat

"
877

♀

" cf. fulva "

DISCARD
32.0g, O-exam

"
878

♀

" cf. unalascensis "

mod. fat, no molt
34.0g, O-exam

23 Sept.

skel. only
879

♀

cf. unalascensis
Passerella iliaca

31.0g, O-exam, Lt. fat, no molt

skel. only

880

♂

" cf. unalascensis "

29.4g, T-1mm
Lt. fat, no molt

skel. only

881

♀

cf. megarhyncha

molt: tail (replacement)

38.6g, O-exam. mod. fat

882

♂

"

"

38.2g

883

♀

"

"

37.2g

884

♀

"

"

37.9g

R. W. Zink
1978

Catalog

[T. 135, R. 28E, NE $\frac{1}{4}$ sec. 28]

1 1/2 mi. S, 1 mi. W Hume, 1950m, Fresno Co., Calif.

24 Sept.

skel. only
885

♂

cf. megarhyncha

Passerella iliaca

singing, Lt. fat. Body molt
36.0g, T. 2x1mm, 2 round worms

886

♂

White-headed Woodpecker

molt: body, outer primaries
no wt. T. 2x1mm, not fat

2030m, T. 135, R. 28E, E $\frac{1}{2}$ sec. 18

887

♂

~~Rufous-sided Towhee~~

DISCARDED

888

♂

cf. megarhyncha

~~*Passerella iliaca*~~

~~36.7g,~~

DISCARDED

skel. only

889

♀

cf. *unalaschensis*

29.3g,

O. exam; Lt. fat, no molt

890

♂

cf. *megarhyncha*

39.3g,

molt: body, secondaries

T. 2.5x1.5mm - Lt. fat

2 1/2 mi. W, 1/2 mi. S Bald Mtn, 5400ft, Fresno Co., Calif.

T. 105, R. 25E, N $\frac{1}{8}$ sec. 4

28 Oct.

891

♀

Passerella iliaca

lt. molt - ventral

trab bursa

31.0g,

O. 3x2mm, sk. unov, Lt. fat

892

♀

"

"

32.0g,

O. 3x1.5mm

893

♂

"

"

35.5g,

T. 1mm

no molt

mod. fat, sk. unov

894

♂

"

"

32.5g,

T. exam

no molt

mod. fat, sk. unov

29 Oct.

895

♀

Zonotrichia

atricapilla

26g

O. exam

Molt: tail

mod. fat

896

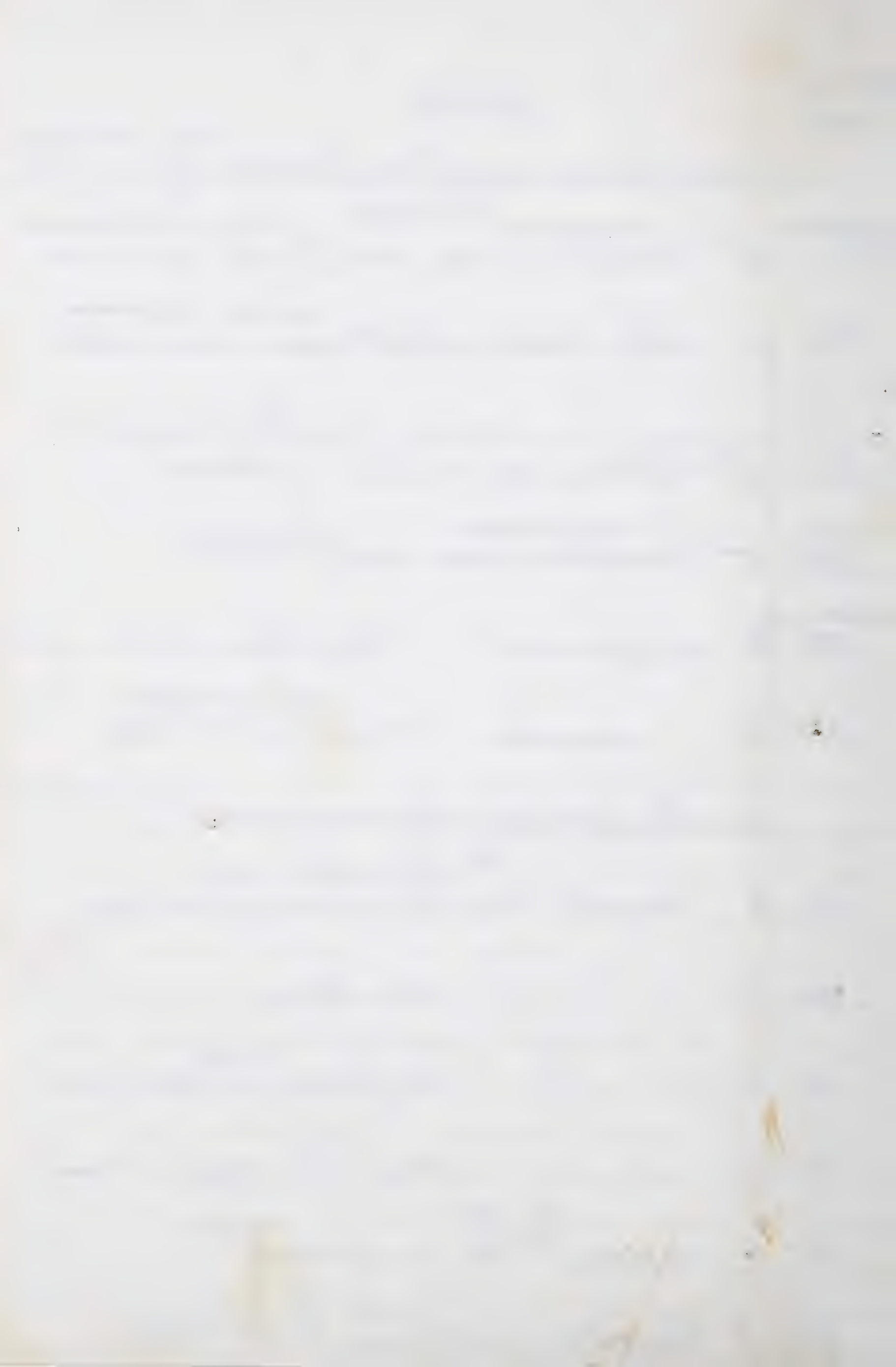
♂

~~*Passerella iliaca*~~

no wt.

T. 1mm

DISCARDED



R.M. Zink

1978/
1979

Catalog

T. 10S, R. 25E, N $\frac{1}{8}$ sec. 4

$\frac{1}{2}$ mi. S, $2\frac{1}{2}$ mi. W Bald Mtn. 5400 ft, Fresno Co., California

29 Oct.

897 ♀ *Passerella iliaca* 31.9, ^{discarded} coll. Debra K. Lawhon.

skel. only

898 ♂ *cf. fulva* " north down T. 1mm, Lt. fat, no molt

899 ? White-headed Woodpeck. 61g, coll. Don O'Stranny
Gonads not seen; 40t fat. molt: tail, body

900 ♂ *cf. unalascensis* *Passerella iliaca* 32g, coll. R. Seib, T. exam., not fat ^{no molt}

28 Oct.

901 ♂ *Passerella iliaca* 32gms. T. 1mm

902 ♂ " " 30gms.

903 ♂ " " 36gms, T. 1mm

2 mi. N, $2\frac{1}{2}$ mi. E Chews Ridge L.O., Monterey Co., Calif. [T. 18S, R. 4E, NW $\frac{1}{4}$ sec. 26]

1979

27 Jan.

904 ♂ Plain Titmouse 19.0g, T. 1.0mm, sk. os, Lt. fat ^{coll. in oak woodland}

905 ♂ *Zonotrichia atricapilla* 34.0g, T. 1.0mm ^{discarded - shot damaged}
^{imm. head pattern}

906 ♂ *"* 34.0g, T. 1.5mm, sk. os, Lt. fat ^{discarded, shot damaged}
^{adult head pattern, w-8%}

Mendocino Nat'l Forest, 2 mi. S, $1\frac{1}{4}$ mi. E Popes Pk. 7600m, Lake Co., Calif. ^[T. 17W, R. 9N, SW $\frac{1}{4}$ sec. 31]

31 March

907 ♂ *Passerella iliaca* 35.5gms, T. 3x2mm, sk. os, mod. fat ^{SI. cloacal protub.}

R.M. Zink
1979

Catalog

[T. 17N, R. 9W, SW $\frac{1}{4}$ sec. 31]

put in Argentina
Mendocino Nat'l Forest, 2 mi. S, $\frac{1}{4}$ mi. E Pogos Pt. ¹⁰²⁰~~460~~ m, Lake Co, Calif.
~~31 March~~ coll. manzanita chaparral

908 ♂ *Chamaea fasciata* 17 g, T. - 5 x 3 mm, sk. oss, lt. fat, molt tail

1 April

909 ♂ *Passerella iliaca* 37.0 gms. ^{no molt} T. - exam, sk. oss, ~~lt.~~ mod. fat

~~910~~

910 ♂ " " 34.5 gms. T. - exam, mod. fat, sk. oss
molt: slight on ventral neck

put in Argentina
~~1 1/2~~ 1 1/2 mi. S, 1/2 mi. W Pogos Pt., ~~1180~~ ¹⁰²⁰ m, Lake Co. California

T. 17N, R. 9W, E $\frac{1}{4}$ sec. 31

911

Hermit Thrush 25.0 gms - coll. in dense clump of 6' manzanita, at edge of coniferous forest - manzanita chaparral
sk. oss, T. - 3 x 2 mm, lt. fat, no molt, stom. - beetles +

912

2 mi. S, $\frac{1}{4}$ mi. E Pogos Pt., ¹⁰²⁰~~460~~ m, Lake Co, Calif. [T. 17N, R. 9W, SW $\frac{1}{4}$ sec. 31]
stom. - seeds molt: throat
♀ *Passerella iliaca* 38.0 gms. O. - 5 x 3 mm (ova < 1 mm)

913

♂ " " 34.0 gms. T. - 3 x 2 mm

^{kern}
1 1/4 mi. E Mt. Pinos ^{8350 ft.} ~~Ventura~~ Co., Calif. T. 9N, R. 21W, SW $\frac{1}{4}$ sec. 33

24 May

skeleton only

914

♂ *Passerella iliaca* 32 gms, T. - 10 x 6 mm, heavy cloacal protub.
mod. fat, sk. oss, no molt

skeleton only

915

♀ " " 43 gms, ~~no~~ ^{unshelled egg in oviduct, lt. brood patch} no molt, sk. oss, ~~mod.~~ fat

916

♂

"

"

37 gms, T. - 10 x 6 mm, heavy cloacal protub.
lt. fat, sk. oss, no molt

skeleton only

917

♀

"

"

45 gms, O. - 12 x 8 (largest ovum 7 mm)
sk. oss, mod. fat, active inc. patch

R. M. Zink

1979

Catalog

1 1/4 mi. E Mt. Pinos, 8350 ft., Kern Co., California
[T. 9N R. 21W, SW 1/4 sec. 33]

24 May

918 ♀ *Passerella iliaca* 38 gms, O. - 10x5mm (largest ovum = 3mm) well devd. brood patch, lt. fat, sk. oss, no molt

919 ♂ " " 36 gms T. - exam, lt. fat, sk. oss, full cloacal protub., no molt

920 ♀ " " 36 gms, O. - 9x5mm (largest ovum = 2mm) incubating 1 egg in nest on ground at base of 2' *Ceanothus*, lt. fat, sk. oss, no molt

921 ♀ Green-tailed Towhee 25 gms, O. - 6x4mm, sk. oss, lt. fat, no molt, active inc. patch

922 ♂ *Passerella iliaca* 30 gms, T. - 9x5mm, sk. oss, lt. fat, no molt, responded to playback, full cloacal protub.

923 ♂ " " 30 gms T. - 7x4mm, mod. cloacal protub., lt. fat, sk. oss, no molt

25 May

924 ♂ *Passerella iliaca* 30 gms, T. - 8x5mm, mod. cloacal protub., lt. fat, singing in fir (25') bordering brush patch, sk. oss.

925 ♂ " " 36 gms, T. - 7x4mm, sk. oss, no molt, singing 80' away (25'), lt. fat, full cloacal protub.

926 ♀ " " 40 gms O. - exam (largest ovum = 10mm), mod. fat, in young fir - fir bordering brush, full cloacal protub., sk. oss, no molt

927 ♀ " " 40 gms, O. - exam, mod. fat, brood patch present, coll. on ground in patch of *Ceanothus*, sk. oss

928 ♂ " " T. - 8x5mm, mod. cloacal protub., no molt, lt. fat, sk. oss, no molt

929 ♀ " " 39 gms O. - exam (largest ovum = 2.5mm) well devd. brood patch, coll. on open ground under pines, 50' from nearest brush, lt. fat, no molt

R.M. Ziolk
1979

Catalog

Kern
1 1/4 mi. E Mt. Pinos, 8350ft., ~~Ventura~~ Co., Calif. [T. 9N, R. 21W, S. 64] ^{src. 133}

25 May

930 ♂ *Passerella iliaca* 36gms. T. - 10x7mm, lt. fat, lt. cloacal protub.
singing from 25' pine, sk. ova, no molt

931 ♂ " " 33gms T. - 9x6mm, sk. ova, lt. fat, no molt
singing from small (20') pine
mod. cloacal protub.

932 ♂ " " 35gms T. - 11x6mm, lt. fat, sk. ova, no molt
responded to imitative call. Mod. cloacal protub.

933 ♂ " " 30gms T. - 8x5mm, lt. fat, sk. ova, no molt.
coll. same spot as #923 (? + late)
singing from small pine, mod. cloacal protub.

934 ♂ " " 29gms (1 day in captivity) - captured 24 May 79
T. - 8x5mm, no molt, mod. cloacal protub.
lt. fat, sk. ova

935 ♂ " " 27gms (1 day in captivity), T. - 10x7mm, ^{no molt: tail}
mod. cloacal protub. (exam. at capture), lt. fat, sk. ova

27 May

936 ♀ *Passerella iliaca* 37gms. T. - 7x5 (largest ovum = 2mm), mod. fat, sk. ova, no molt, mod. active brood patch.
Active brood patch. coll. on ground near brood

937 ♂ " " 37gms, T. - 11x7mm, mod. cloacal protub., lt. fat
on ground; heard sing prev. (2 min before coll.), sk. ova, no molt

skeleton only
938 ♂ " " 34gms, T. - 11x7mm, full cloacal protub.
singing from 15' fir, sk. ova, lt. fat, no molt

skeleton only
939 ♂ " " 34gms, T. - 8x5mm, mod. cloacal protub.
singing 15' Ponderosa pine, sk. ova, lt. fat, no molt

940 ♂ " " 37gms, T. - 13x9mm, full cloacal protub.
singing small pine, sk. ova, mod. fat, no molt

R. W. Zink
1979

Catalog

2 mi. E Red Mtn, 6340ft, Kern Co, California,

[T. 25S, R. 32E, SE 1/4 sec. 6]

13 June

skeleton only

941

♂

Passerella iliaca 35.8gms, T. - 10x6mm, W. - 84.3mm, t. - 85.7mm

lt. fat, no molt, full cloacal protub.

942

♀

"

"

active brood patch, no molt
37gms, O. - exam (largest ovum 3mm), lt. fat, sk. oss

skeleton only

943

♂

"

"

39gms, T. - 12x8mm, W. - 81.9mm, t. - 88.1mm
no molt (worn)

lt. fat, sk. oss, full cloacal protub.

944

♂

"

"

singing, no molt, sk. oss
38gms, T. - 9x5mm, lt. fat, full cloacal protub.

945

♂

"

"

lt. fat, no molt, sk. oss.
37gms, T. - 9x5mm, full cloacal protub.

946

♂

"

"

sk. oss, no molt
41gms, T. - 10x6mm, mod. fat, full closed protub.

skeleton only

947

♀

coll. L. M. Conroy

(ova 2mm), sk. oss, lt. fat, active brood patch
35gms, W. - 77.1mm, t. - 78.2mm (fragst)
O. - exam

2 mi. E, 1 mi. S Red Mtn, 6200ft, Kern Co. Calif. [T. 25S, R. 32E, NE 1/4 sec.]

skeleton only

948

♂

coll. L. M. Conroy

"

W. - 82.5mm, t. - 93.7mm, full cloacal protub.
35gms, T. - 8x4mm, lt. fat, no molt, sk. oss

2 mi. E Red Mtn, 6340ft, Kern Co. Calif. [T. 25S, R. 32E, SE 1/4 sec. 6]

skeleton only

949

♂

"

"

W. - 78.5mm, t. - 89.0mm, no molt
34gms, T. - 9x5mm, sk. oss, lt. fat, full cloacal protub.

950

♂

"

"

Increment in
singing along rd. in 50' cedar in Calif. + fir stand w/ per
understory - + no brush nearby! sk. oss. no molt
34gms, T. - 9x6mm, full cloacal protub, mod. fat.

2 1/2 mi. S, 1 mi. E Red Mtn, 6300ft, Kern Co. Calif. [T. 26S, R. 31E, SE 1/4 sec. 13]

951

♂

"

"

mod. fat, sk. oss. no molt
37gms, T. - 9x5, full closed protub.

R. M. Zink
1979

Catalog

14 June 1 mi. S, 1 mi. E Red Mtn. 6300 ft., Kern Co. Calif. [T. 26S, R. 31E, NE 4 sec. 12]
952 ♂ *Passerella iliaca* 37 gms, T. - 8x5 mm, lt. fat, full cloacal protub.,
vocal recording, no molt, sk. oss

953 ♀ coll. L. M. Conroy " mod. active breast patch, lt. fat, no molt.
32 gms, O. - 7x5 mm (largest ovum = 2 mm), sk. oss

954 ♂ coll. L. M. Conroy " carrying food in bill (tent caterpillar), Full cloacal protub.
35 gms, T. - 12x6 mm, lt. fat, sk. oss, no molt

166506 955 ♀ 1/2 mi. W Woodward Peak 5800' Kern Co. Calif. [T. 26S, R. 32E, NW 8 sec. 29]
Sagebrush 46 gms, O. - 6x4 mm (ova 5 mm), broad patch
stom. - Hymenoptera: Formicidae

166507 956 ♂ 1 mi. S, 1 mi. E Red Mtn, 6300 ft., Kern Co. Calif. [T. 26S, R. 31E, NE 4 sec. 12]
Passerella iliaca 35 gms, T. - 10x6 mm, lt. fat, full cloacal protub.,
(coll. L. M. Conroy) taget song (end of side w/ mt. line / Red Mtn.)
no molt, sk. oss.

957 ♂ " " "roadside bird" - t. red song (x10), sk. oss, no molt
38 gms, T. - 12x6 mm, lt. fat, full cloacal protub.

15 June

166792 958 ♂ Western Tanager 29 gms, T. - 12x7, lt. fat, sk. oss, no molt
prop. L. M. Conroy. Full cloacal protub.

166793 959 ♂ *Passerella iliaca* 35 gms T. - 8x4 mm, lt. fat, full cloacal protub.
skeleton only w - 79.6 mm, t - 84.7 mm no molt, sk. oss

166794 960 ♂ " " no molt, sk. oss.
39 gms, T. - 12x8 mm, lt. fat, full cloacal protub.

166795 961 ♂ coll. L. M. Conroy " w - 83.0 mm, t - 84.8 mm full cloacal protub. no molt
skeleton only 38 gms T. - 8x5 mm, sk. oss, lt. fat

1 mi. N Dome Rock, 2400 m, Tulare Co. Calif. [T. 20S, R. 32E, E 2 sec. 20]

16 June

166796 962 ♂ *Passerella iliaca* 37 gms, T. - 10x7, lt. fat, full cloacal protub., sk. oss.
skeleton only w - 83.2 mm, tail - 88.5 mm. singing from 20' pine. No molt

R.M. Zink
1979

Catalog

7 mi. W Dome Rock, 2400m, Tulare Co. Calif. [T. 205, R. 32E, E $\frac{1}{2}$ sec. 20]

16 June

963 ♂ *Passerella iliaca* 35 gms. ^{sk. oss., no molt} T. - 10x6mm, lt. fat, full cloacal protub.

skeleton only

964 ♂

"

"

wing 82.3mm, tail - 89.0mm. No molt. sk. oss.

37 gms. T. - 11x7mm, lt. fat, full cloacal protub.

965 ♀

"

"

mod. active brood patch, lt. fat, sk. oss., no molt

34 gms. O. - 10x5mm (largest ova ≤ 1.5 mm), carrying food

picked

966 ♂

Calliope Hummingbird

displaying

no wt. T. - exam.

17 June

skeleton only

967 ♂

Passerella iliaca 35 gms. T. - 10x6mm, lt. fat, full cloacal protub.

w - 89.6mm, t - 84.0mm ~~no~~ no molt, sk. oss.

968 ♂

♂

cal. L. m. canary "

"

36 gms. T. - 11x6mm

no molt

sk. oss, lt. fat, full cloacal protub.

4 mi. W Dome Rock, 2225m, Tulare Co, Calif. [T. 215, R. 32E,

(west) $\frac{1}{2}$ sec. 9]

skeleton only

969 ♀

♀

Passerella iliaca 36 gms. O. - 10x4mm (largest ovum = 2mm), lt. fat, sk. oss.

w = 75.6mm, t = 79.7mm mod. active brood patch. No molt

skeleton only

970 ♂

"

"

wing = 82.5mm, tail = 86.0mm no molt. sk. oss.

36 gms. T. - 8x5mm, lt. fat, full cloacal protub.

971 ♀

"

"

lt. fat, sk. oss, no molt

34 gms. O. - 8x4mm (ova ≤ 1 mm), mod. active brood patch

skeleton only

972 ♂

"

"

wing = 77.9mm, tail = 80.4mm no molt, sk. oss

34 gms. T. - 8x4mm. lt. fat mod. cloacal protub.

skeleton only

973 ♂

"

"

w - 82.4mm, tail = 87.5mm no molt

35 gms. T. - 10x6mm, sk. oss, lt. fat, full cloacal protub.

974 ♂

"

"

sk. oss, no molt

34 gms. T. - 10x6mm, lt. fat, full cloacal protub.

975 ♂

"

"

sk. oss., no molt

36 gms. T. - 8x4mm, lt. fat, full cloacal protub.

R.M. Zink
1979

Catalog

4 mi. N Dome Rock, 2225m, Tulare Co., Calif. [T. 21S, R. 32E, W. 2sec. 9]

17 June

coll. L.M. Conroy

no molt

976 ♂ *Passerella iliaca* 35gms., T. - 9x5mm, sk. oss, lt. fat, full cloacal protub.

18 June

skeleton only

wing - 82.7mm tail - 84.6mm. Lt. fat, full cloacal protub.

977

♂

coll. L.M. Conroy

35gms. T. - 4xmm (breeding cond), no molt, sk. oss

skeleton only

978

♂

"

"

wing - 81.8mm tail - 83.1mm, no molt, full cloacal protub.
35gms. T. - 8xmm (breeding condition), sk. oss, lt. fat

979

♂

coll. L.M. Conroy

no molt. lt. fat

40gms., T. - 10x5mm, sk. oss, full cloacal protub.

skeleton only

980

♂

used for chromosome prep. wing - 76.7mm, tail - 79.1mm, sk. oss, no molt

"

35gms. T. - 8x4mm, lt. fat, full cloacal protub.

coll. Laurence M. Conroy

full cloacal protub.

2 old retrices

981

♂

Myadestes townsendi 34gms. T. - 9x5mm, lt. fat, molt tail?, sk. oss.

carrying bundle of in bill (w/ stinger) no molt

982

♂

Cyanocitta stelleri ~108gms., T. - 8x3mm, sk. oss, lt. fat, mod. cloacal protub.

983

♂

Lincoln Sparrow 18gms. T. - 10x5mm, sk. oss, lt. fat, full cloacal protub.

984

♂

Passerella iliaca 37gms. T. - 11x6mm, lt. fat, sk. oss, full cloacal protub.

19 June

skeleton only

985

♂

Passerella iliaca 38gms. T. - 10x5mm, lt. fat, full cloacal protub.

w - 81.1mm, t - 86.5mm No molt, sk. oss

20 June

skeleton only

986

♀

"

"

wing - 77.4mm tail - 70mm, no molt
29gms (capture 8 hrs). O. - 9x5mm (ova $\leq 15\mu$), lt. fat, sk. oss
active brood patch

skeleton only

987

♀

"

1

w - 74.0mm, tail - 70mm, lt. fat, sk. oss, no molt
23gms (capture 8 hrs) O. - 8x4mm (largest ova $\leq 1\mu$)
active brood patch

R.M. Zink
1979

Catalog

4 mi. N Dome Rock, 2225m, Tulare Co, Calif. [T. 215, R. 32E, W¹
sec. 9]

20 June

166171 skeleton only 988 ♂ ^{used for chromosome} *Passerella iliaca* no wt. T-11x6mm, lt. fat, full cloacal protub. no molt

[19 June]

166172 989 ♂ " " 30 eggs (held in captivity) full cloacal protub., no molt, sk. oss. T-11x7mm, lt. fat,

skeleton only

990 ♂

90-39-10-22.3 = 5 eggs

166173 2 mi. N, 1 mi. E Shell Mtn, 2075m, Fresno Co, Calif. [T. 135, R. 29E, SW 1/4 sec. 36]

21 June

skeleton only

991 ♀

Passerella iliaca 38 eggs. O-exam. Lt. fat, no molt, sk. oss. w-77.7mm, t-78.3mm brood patch.

1 mi. W Lookout Pk., 2135m, Fresno Co, Calif. [T. 135, R. 30E, SW 1/4 sec. 21]

skeleton only

992 ♀

"

"

w-76.2mm t-78.3mm active inc. patch, no molt 33 eggs. O-8x4mm ova ≤ 1mm, lt. fat, sk. oss.

skeleton only

993 ♂

"

"

w-81.7mm t-82.9mm full cloacal protub. 37 eggs, T-10x5mm, lt. fat, sk. oss, no molt

994 ♂

♂

Mt. Quail

no wt. T-exam.

"DIN"

lt. fat, no molt

22 June

995 ♂

Passerella iliaca 34 eggs, T-7x4mm, lt. fat, mod. cloacal protub. sk. oss, no molt

996 ♂

♂

"

"

mod. cloacal protub., no molt 33 eggs, T-16x9mm, lt. fat,

997 ♀

♀

"

"

mod. active inc. patch, lt. fat, no molt 39 eggs. O-exam (ova ≤ 2mm), lt. fat, sk. oss.

skeleton only

998 ♀

"

"

w-75.8mm, t-74.5mm active brood patch 34 eggs. O-exam lt. fat, sk. oss, no molt

skeleton only

999 ♀

"

"

w-77.6mm, t-83.9mm active brood patch 32 eggs, O-exam, lt. fat, sk. oss, no molt

R.M. Zink

1979

Catalog

1 mi. W Lookout Pk, 2350m, Fresno Co. Calif. T. 135, R. 30E, SW $\frac{1}{4}$ sec. 21

22 June

1000 ♂ *Passerella iliaca* 34gms, T. - 10x6mm, Lt. fat, full cloacal protub. ^{no molt, sk. oss.}

skeleton only
1001 ♂ " " 34gms, T. - 10x6mm, Lt. fat, sk. oss, no molt ^{w - 79.1mm, t - 85.0mm full cloacal protub.}

4 mi. N, 1 mi. E Shell Mtn, 2120m, Fresno Co. Calif. [T. 135, R. 29E, NE $\frac{1}{4}$ sec. 36]

skeleton only
1002 ♀ " " 32gms, O. - 6x3mm (ova $\leq$ 1mm), no molt ^{w - 78.1mm, t - 78.8mm, mod. brood patch, Lt. fat, sk. oss.}

1003 ♂ " " 35gms, T. - 10x5mm, Lt. fat, full cloacal protub. ^{sk. oss, no molt}

1004 ^{ex?} Juv. " " 31gms, Gonads not formed, Lt. fat, sk. unoss

1 mi. W Lookout Pk, 2350m, Fresno Co. Calif. [T. 135, R. 30E, SW $\frac{1}{4}$ sec. 21]

1005 ♂ " " 37gms, T. - 8x4mm, Lt. fat, mod. cloacal protub. ^{sk. oss, no molt}

skeleton only
1006 ♂ " " 33gms, T. - 10x6mm, Lt. fat, mod. cloacal protub. ^{w - 78.2mm, tail - 81.8mm, no molt, sk. oss.}
" Horse Corral Meadow

1 $\frac{1}{4}$ mi. W, 2 mi. S Lookout Pk, 2200m, Fresno Co. Calif. [T. 135, R. 30E, NE $\frac{1}{4}$ sec. 29]

23 June

skeleton only
1007 ♂ " " 34gms, T. - 8x5mm, Lt. fat, mod. cloacal protub., no molt ^{w - 80.6mm, t - 83.4mm, mod. sk. oss.}

1008 ♀ " " 30gms, O. - 7x3mm (ova $\leq$ 1mm), Lt. fat, no molt ^{mod. active brood patch, sk. oss}

1009 ♂ " " 36gms, T. - 11x6mm, Lt. fat, mod. cloacal protub. ^{sk. oss, no molt}

skeleton only
1010 ♂ Green-tailed Towhee wuf, T. - 8x6mm, sk. oss, Lt. fat ^{no molt}

skeleton only - used for chromosomes
1011 ♀ *Passerella iliaca* 37gms, O. - 10mm egg in ovary, sk. oss. ^{w - 77.7mm, t - 80.0mm, Lt. fat, mod. brood patch, no molt}

R.M. Zink
1979

Catalog

1 mi. W Lookout Pk. 2350m, Fresno Co. Calif. [T. 135, R. 30E, SW 1/4 sec. 21]

[22 June]

857 pickled
1012

Calliope Hummer m. wt. T. - ? or [F]

2 mi. N Shell Mtn. 2250m, Tulare Co., Calif. [T. 145, R. 29E, N 1/2 sec. 11]

23 June

skeleton only

1013

♀

Passerella iliaca

32gms.

mod. active brown patch, sp. oss

O, - exam, lt. fat, no molt

skeleton only

1014

♂

"

"

34gms

mod. closed protub., no molt

T. - 6 x 4mm, lt. fat, sp. oss

1015

♂

"

"

36gms

no molt, sp. oss

T. - 9 x 5mm, lt. fat, full cloacal protub.

1016

♂

coll. L.M. Conroy

"

"

33gms.

no molt

T. - 7 x 4mm, lt. fat, mod. cloacal protub.

1017

♂

coll. L.M. Conroy

"

"

36gms.

no molt

T. - 9 x 5mm, sp. oss, lt. fat, mod. closed protub.

1018

♂

4 mi. N 1 mi. E Shell Mtn. 2120m, Fresno Co. Calif. [T. 135, R. 29E, NE 1/4 sec. 36]

coll. L.M. Conroy

"

"

37gms.

T. - 8 x 5mm, sp. oss, lt. fat, mod. closed protub. no molt

1019

♂

coll. L.M. Conroy

"

"

36gms.

sp. oss

T. - 6 x 4mm, lt. fat, mod. closed protub., no molt

25 June

1020

♂

Solitary Vireo 15gms.

T. -

1/2 mi. S, 2 1/2 mi. W Bald Mtn. 5400 ft., Fresno Co., Calif. [T. 105, R. 25E, N 1/4 sec. 4]
no molt sp. oss.
R. - 5 x 3mm
L. - 3 x 1 1/2mm, lt. fat, mod. closed protub.

skeleton only

1021

♂

Passerella iliaca 24g.

(HELD IN CAPTIVITY), T. - 7 x 4mm,

no molt, mod. closed protub.

lt. fat, sp. oss

skeleton only

1022

♂

W - 80mm, t. - 79mm

"

31g. (CAPTIVE), T. - 9 x 5mm,

no molt, full cloacal protub.

lt. fat, sp. oss

R. M. Zink

1979

Catalog

2 mi. S, 2 1/2 mi. W Bald Mtn, 5400 ft, Fresno Co, Cal. f. [T. 105 R. 29 E, N 4 Sec. 35] ⁵ ⁴

25 June

164610 skeleton only *Passerella iliaca* w-83.3⁺mm, tail-85.7⁺mm, full cloacal protub.
1023 ♂ *Passerella iliaca* 26 gms (captive), T.-10x4mm, lt. fat, sk. oss, no molt

164611 skeleton only *Passerella iliaca* 24 gms (captive), T.-11x4mm, lt. fat, no molt
1024 ♂ " " full cloacal protub, sk. oss.

26 June

164612 skeleton only *Passerella iliaca* 29 gms, O.-3x1 1/2mm (not granular)
1025 ♀ " " lt. fat, sk. unoss

27 June

164613 skeleton only *Passerella iliaca* 35 gms, T.-6x4mm, full cloacal protub, no molt
1026 ♂ *Passerella iliaca* recorded w-79.1⁺mm, t-82.6⁺mm. lt. fat, sk. oss.

164614 skeleton only *Parus gambeli* 11 gms, O.-4x2mm (ova 51mm), no molt, lt. fat
1027 ♀ *Parus gambeli* w-60.4⁺mm, t-52.0⁺mm. Broad patch DIN

164615 skeleton only *Junco hyemalis* 20 gms, O.-10x6mm (largest ovum = 4mm)
1028 ♀ *Junco hyemalis* w-70.5⁺mm, t-62.1⁺mm. Broad patch DIN, lt. fat, sk. oss, no molt

164616 skeleton only *Passerella iliaca* 36 gms, T.-6x4mm, lt. fat, mod. cloacal protub.
1029 ♂ *Passerella iliaca* carrying food w-79.5⁺mm, t-79.4⁺mm. no molt, sk. oss

164617 skeleton only *Passerella iliaca* 35 gms, T.-8x4mm, sk. oss, no molt, lt. fat, mod. cloacal protub.
1030 ♂ " " w-77.3⁺mm, t-79.2⁺mm

164618 skeleton only *Passerella iliaca* 34 gms, T.-9x5mm, no molt
1031 ♂ " " w-82.0⁺mm, t-85.7⁺mm. sk. oss, lt. fat, full cloacal protub.

164619 skeleton only *Passerella iliaca* 32 gms, T.-9x5mm, full cloacal protub, lt. fat, no molt
1032 ♂ " " w-82.2⁺mm, t-83.5⁺mm. sk. oss

164620 skeleton only *Passerella iliaca* 22 gms (captive), T.-1mm, sk. unoss, Lt. fat
1033 ♂ " " broken 25mm w-77.5mm, t-fragged in nest, no molt

164621 skeleton only *Passerella iliaca* 34 gms, T.-6x4mm, sk. oss, lt. fat, no molt, mod. cloacal protub.
1034 ♂ " " w-79.5⁺mm, t-81.8⁺mm

164622 skeleton only *Passerella iliaca* 33 gms, T.-9x5mm, lt. fat, mod. cloacal protub.
1035 ♂ " " w-81.6⁺mm, t-fragged. sk. oss

R.M. Zink
1979

Catalog

1/2 mi. S, 2 1/2 mi. W Bald Mtn, 5400ft, Fresno Co., Calif. [T. 10S, R. 25E, NE 1/4 sec. 25]

28 June

skeleton only
1036

brood patch
♀ *Passerella iliaca* 32gms. O - exam. sk, os, lt. fat, no molt

skeleton only
1037 ♂

sk, os, no molt
" " 34gms. T - 7x5mm, mod. cloacal protub., lt. fat

Wyman Creek, 3 1/2 mi. S Bucks Peak, 8640ft, Inyo Co., Calif. [T. 6S, R. 35E, NE 1/4 sec. 9]

2 July

prob
mates.

1038

♀ *Passerella iliaca* 27gms. carrying food, mod. active inc. patch. col. willow thicket
O - 5x3mm (ova 5/1mm), sk. os, lt. fat

1039

♂

"

"

col. willow thicket. no molt
29gms. T - 5x3mm, lt. fat, sk. os, mod. cloacal protub.

Roberts Ranch on Wyman Creek, 8100ft, 3 1/2 mi. S, 2 mi. E Bucks Peak, Inyo Co., Calif.
[T. 6S, R. 35E, NE 1/4 sec. 14]

3 July

1040

♂

Passerella iliaca

singing in willows. mod. cloacal protub.
34gms. T - 8x4mm, sk. os, lt. fat, no molt

1041

♂

Song Sparrow

singing from dead willow clump in meadow along Wyman Cr.
22gms. T - 7x4mm, mod. cloacal protub., lt. fat
stom. - insect remains (Coleoptera, etc.)

skeleton only

1042

♂

"

w - 65.55mm stom. - insect remains + seeds
20gms. T - 1mm t - molting, sk. os, lt. fat

1043

♂

Zonotrichia leucophrys

mod. cloacal protub.
28gms. T - 6x4mm, lt. fat, sk. os, no molt

Wyman Creek, 7800ft, 4 mi. S, 2 mi. W Iron Mtn, Inyo Co., Calif.
[T. 6S, R. 35E, NE 1/4 sec. 13]

1044

♂

Passerella iliaca

no molt. T - 5x3mm, sk. os, lt. fat, no molt, mod. cloacal protub.
4 mi. S Iron Mtn, on Wyman Creek, 7420ft, Inyo Co., Calif. [T. 6S,
R. 36E, center sec. 18]

skeleton only

1045

♂

"

"

w - 78.5mm lt. cloacal protub., T - 82.95mm
no molt. T - 6x4mm, lt. fat, no molt, sk. os

R.M. Zink
1979

Catalog

4 mi. S Iron Mtn. on Wyman Cr., 7420ft, Inyo Co., Calif. T. 65,
R. 36E, center sec. 18

3 July 1046 ^{Imm.} ^{skeleton only} *Passerella iliaca* W-72.45mm, t-molting in.
32gms. O-2x1mm, bursa 5mm, lt. fat, sk. unoss

4 July

1047 ♂ " " Gut cavity w/ many 1 1/2" white worms (some segmented)
no wt. T.-10x6mm, sk. oss, lt. fat, no molt, mod. cloacal protub.
sings

1048 ♂ " " sings s/c. oss
31gms. T.-9x5mm. Lt. fat, mod. cloacal protub. no molt

1049 ^{Imm.} *Cinclus mexicanus* 42gms, O.-2 1/2 x 1mm (not granular), Mod. fat, no molt
2 nuc. tubes, sk. unoss, bursa 7x4mm
body poss. brood patch.

1050 ♂ ^{skeleton only} *Gymnorhinus cyanocephalus* pin feathers on abdomen. 5th too frayed
Pinyon Jay T.-3x1mm, 108gms. molt: tail (center retrics), wing-
outer 1's + outer 2'

1051 ♂ ^{skeleton only} " " inc. patch (recently active)
107gms. T.-3x1mm, sk. oss, lt. fat, no molt

1052 ♂ ^{skeleton only} " " 94gms. T.-1mm, molt, sk. oss, lt. fat,

1053 ♀ ¹²⁹³¹ *mona* swimming at edge of *Croton canadensis* pond. Prob. lactating on recently
36gms. 300-80-20-10 ± 36gms. stopped

1054 ♂ ^{skeleton only} *Passerella iliaca* W-76.5mm, t-79.35mm, lt. cloacal protub.
29gms. T.-6x3mm, no molt, sk. oss, lt. fat

1055 ♀ ^{skeleton only} " " W-71.4mm, t.-too frayed mod. brood patch, no molt
28gms. O.-5x3mm (ova < 1mm), lt. fat, sk. oss.

1056 ♂ ^{skeleton only} Song Sparrow W-65mm, t.-too frayed, mod. cloacal protub.
22gms. T.-7x5mm, lt. fat, sk. oss, no molt

1057 ♀ ^{skeleton only} *Passerella iliaca* W-75mm, t.-too frayed mod. active brood patch. no molt
28gms. O.-6x3mm (ova < 1mm), sk. oss, lt. fat, sk. oss.

P

R. M. Zink
1979

Catalog

[T. 15, R. 33E, S. 2 sec. 9]

Trail Canyon, 9000ft., 1 1/2 mi. S Kennedy Point, Esmeralda Co., Nevada

5 July
- not 27!

1058 ♂ *Passerella iliaca* 37gms. T. - 7x4mm, sk. oss, lt. fat, mod. cloacal protub. Point SW 1/4 sec. 9 Co.,

Trail Canyon,

6 July 1 1/2 mi. S 1/4 mi. W Kennedy Pt., 9400ft. Esmeralda Co., Nev.
full cloacal protub.

1059 ♂ " " 29gms. T. 8x5mm, lt. fat, sk. oss, no molt

skeleton only
1060 ♂

w - too frayed t - 84.80mm lt. fat
31gms T - 7x5mm, sk. oss, no molt, lt. cloacal protub.

1061 ♂

33gms T. - 9x5mm, sk. oss, lt. fat, (mod. cloacal protub. 9400ft)

1 1/2 mi. S Kennedy Pt., Esmeralda Co., Nevada (Trail Canyon S. 2 sec. 9)
(9000ft.)

1062 ♂ *Empidonax*

gape - yellow, lower mandible darkish, sl. yellow basally
lt. mod. cloacal protub.
12gms. T. - 5x3mm, sk. oss, lt. fat, light body, molt - ventral
on sagebrush n. side, 20m from Rosa + 25m from stream; 11gms

"Trail Canyon"

1 1/2 mi. S, 1/4 mi. W Kennedy Point, 9400ft., Esmeralda Co., Nevada [T. 15, R. 33E, SW 1/4 sec. 9]

1063 ♂ *Passerella iliaca* 31gms. T. - 4x2mm. Lt. cloacal protub. sk. oss, lt. fat, no molt

pickle

1064

Broad-tailed Hummingbird 3gms.

[♀] - but check

7 July

1065 ♀ *Passerella iliaca* 31gms. mod. active brood patch. O. - largest ovum 6mm
mod. - ventral body, sk. oss, lt. fat

skeleton only
1066 ♂

singing from w. 11gms w - 77.4mm t - 78.25mm no molt.
29gms. T. - 8x4mm. mod. cloacal protub. lt. fat, sk. oss.

Trail Canyon, 8500ft., 1 mi. S 1/2 mi. E Kennedy Point, Esmeralda Co., Nev. [T. 15, R. 33E, NW 1/4 sec. 10]
w - 78.5mm, t - 80.3mm sk. oss,

1067 ♂ " " 35gms. T. - 7x5mm, mod. cloacal protub. lt. fat no molt

skeleton only
1068 ♂

w - 77.55mm t - 78.5mm sk. oss
34gms. T. 6x4mm lt. cloacal protub. lt. fat, no molt

1069 ♀

33gms. O. - 7x4mm (ova 4mm) sk. oss, lt. fat,
w - 80.6mm Lt. cloacal protub.
mod. active in fat, no molt st. ventral track

skeleton only
1070 ♂

28gms (minuta!) T. - 4x2mm, lt. fat, no molt, sk. oss.



R. M. Zink
1979

Catalog

[T. 15, R. 33E, NE 4 sec. 10]

7 July Trail Canyon, 8300ft., 1 mi. S, 1 mi. E Kennedy Point, Esmeralda Co., Nevada

1071 ♂ *Passerella iliaca* 30 gms. T. - 6 x 4 mm, sk. os, ^{lt. fat} mod. cloacal protub., no molt

1072 ♂ " " 34 gms. T. - ^{5 x 3 mm} ~~4 x 3 mm~~, no molt, mod. cloacal protub., sk. os, lt. fat

1073 ♂ " " w - 78.1 mm, t - 80.9 mm lt. cloacal protub.
32 gms. T. - 4 x 2 mm, lt. fat, no molt, sk. os

1074 ♂ " " 37 gms. T. - 7 x 4 mm lt. fat, sk. os, no molt, mod. cloacal protub.

1075 ♂ " " w - 83 mm t - 80.9 mm lt. fat, no molt, mod. cloacal protub.
33 gms. T. - 11 x 8 mm

1076 ♂ " " 34 gms. T. - 7 x 4 mm, sk. os, lt. fat, no molt, mod. cloacal protub.

8 July
1077 ♂ " w - 80.85 mm, t - 82.0 mm
29 gms (captive 3 hrs.), T. - 5 x 3 mm, lt. fat, no molt, sk. os

1078 ♀ " " mod. active brown patch
33 gms. O. - exam., lt. fat, no molt, sk. os

1079 ♀ " " no tumors
no wt. (captive overnight), O. - 5 x 3 mm (vac. in), lt. fat, no molt, sk. os

9 July

1080 ♂ Poorwill 42 gms. T. - 7 x 4 mm, possible old inc. patch, no fat, no molt
nested along stream w/ willows

1081 ♂ *Passerella iliaca* captive - no wt. T. - 1 mm, sk. unoss, lt. fat, no molt
used for kangaroo NO trunk skel. bus 5 mm x 3 mm

1082 ♀ " no trunk skel. CAPTIVE - no wt., lt. fat, sk. unoss, no molt
used for kangaroo w - 76.9 mm, t - 74.6 mm

R. M. Zink
1979

Catalog

8 1/2 mi. W Benton Hot Springs, 8400 ft, Mono Co., Calif. [T. 2S, R. 30E, sec. 5] SW 1/4

12 July

skeleton only

1083

♀

Passerella iliaca

346 ms.

foraging on ground ~80% *Populus tremuloides* 3-18 ft, oaky gray soil. W-75.9 mm, T-81.65 mm. Active inc. patch, sk. oss, lt. fat, no molt

coll. L. M. Conroy

mod. active inc. patch

166507

1084

♀

Sapsucker

448 ms.

O - 5 x 3 mm (ova < 1 mm), stom. - Formicidae

2 mi. S, 1 mi. E Lee Vining Pk, 2240 m, Mono Co., Calif. [T. 1N, R. 25E, SE 1/4 sec. 14]

14 July

skeleton only

1085

♀

Passerella iliaca

288 ms.

W-74.3 mm, t. - tornum, lt. fat, sk. oss. O. - exam (ova small), inactive inc. patch

singing from Mt. Mahogany

1086

♂

"

"

32 gms.

O - 5 x 3 mm (ova < 1 mm), st. active brood patch, sk. oss, lt. fat, no molt

molt: inner 1's, tail, body

1087

♂

"

"

30 gms.

T. - 3 x 2 mm, sk. oss, lt. fat, lt. cloacal protub.

singing from Mt. Mahogany

Full cloacal protub.

1088

♂

"

"

32 gms.

T. - 9 x 4 mm, sk. oss, lt. fat, no molt

skeleton only

1089

♂

"

"

346 ms

T. - 3 x 2 mm, sk. oss, no molt, lt. cloacal protub., lt. fat

skeleton only

1090

♂

Charina bottae

DOR

59 gms.

SN-V - 430 mm

TL - 490 mm

14 July

skeleton only

1091

♂

Passerella iliaca

32 gms.

lt. fat, sk. oss, no molt. T. - 6 x 4 mm. Mod. cloacal protub.

1092

♀

"

"

sk. oss, no molt, lt. fat, inactive brood patch. no wt. O. - 4 x 2 mm (ova < 1 mm)

2 mi. S, 1/2 mi. W Lee Vining Pk, 2300 m, Mono Co., California [T. 1N, R. 25E, NE 1/4 sec. 15]

15 July

skeleton only

1093

♂

"

"

W - 81.5 mm, T - 83.5 mm, mod. cloacal protub. 33 gms. T. - 7 x 4 mm, lt. fat, sk. oss, no molt

RMZ
RMZ
RMZ

RMZ
RMZ
RMZ smells great

R.M. Zink

1979

Catalog

2 mi. S $\frac{1}{2}$ mi. W LeVining Pk, 2300m, Mono Co, Calif. [T. 10N, R. 25E, NE $\frac{1}{4}$ sec. 15]

skeleton only

1094

♀

Passerella iliaca

28gms.

O. - 4x2mm (ova < 1mm), lt. fat, sk. oss,

skeleton only

1095

♂

"

"

29gms. T, 1mm, lt. fat, sk. unoss, no molt

1096

♂

"

"

29gms T, 1mm lt. fat, lt. body molt, sk. unoss

1097

♂

"

"

31gms. T, 1mm. sk. unoss, lt. fat, no molt

1098

♂

"

"

30gms. T, 1mm, lt. fat, sk. unoss, no molt

3 mi. E Mineral Mtn, 2410m, Alpine Co, Calif. T. 8N, R. 22E, E $\frac{1}{2}$ sec. 21

1099

♂

"

singing 32gms. T. - 4x2mm, lt. fat, mod. cloacal protub, no molt

skeleton only

1100

♀

"

" possibly feeding young *Malothrus* etc. w + t worn, lt. fat
30gms. O. - 5x3mm (ova < 1mm), inactive brood patch

skeleton only

1101

♀

"

16 July
w - too worn t - too worn, sk. oss, no molt, lt. fat
30gms. O. - 4x2mm (ova < 1mm) inactive brood patch

skeleton only

1102

♀

"

" w + t too worn, sk. oss, lt. fat, no molt
29gms O. - 4x2mm (ova < 1mm) inactive brood patch

skeleton only

1103

♂

"

" w - 80.35mm t - molt
32gms. T, 1mm, sk. unoss, lt. fat,

skeleton only

1104

♀

"

" w - 79.5mm w - 76.2mm inactive brood patch
30gms. O. - 5x3mm (ova < 1mm) sk. oss, lt. fat, no molt

skeleton only

1105

♀

"

" w + t too worn. inactive brood patch
32gms. O. - 4x2mm (ova < 1mm), sk. oss, lt. fat
molt: inner 1 $\frac{1}{2}$, tail, wing coverts

skeleton only

1106

♂

"

" mod. cloacal protub.
31gms. T. - 5x3mm, lt. fat, sk. oss, no molt

R.M. Zink
1979

Catalog

16 July 3mi. E Mineral Mtn, 2410m, Alpine Co. Calif. [T. 8N, R. 22E, E 1/2 sec. 21]

1107 ♀ *Passerella iliaca* 29gms. O - 4x2mm (ova < 1mm). Inactive brood patch. w - 76.6mm t - 82.2mm. St. mod. Lt. fat. No molt

1108 ♂ White breasted Nuthatch 18gms. T - 2x1mm, sk. mod, Body molt. 3mi. E, 1mi. S Mineral Mtn, 8200ft., Mono Co. Calif. [T. 8N, R. 22E, NE 1/4 sec. 28] Lt. fat, no cloacal protub.

1109 ♂ *Passerella iliaca* 34gms. T - 10x6mm. Mod. cloacal protub. Mod. fat, sk. mod. 3mi. E Mineral Mtn, 2410m, Alpine Co. Calif. [T. 8N, R. 22E, E 1/2 sec. 21] no molt

1110 ♂ " " 34gms. T - 4x2mm. Mod. fat, sk. mod, no molt, Lt. cloacal protub. singing from Mt. Mahogany on brushy hillside (Tobacco bush)

1111 ♀ " " 30gms. O - 4x2mm (ova < 1mm). Inactive brood patch. 4mi. E Mineral Mtn, 2400m, Mono Co. Calif. [T. 8N, R. 22E, W 1/2 sec. 22] w - 73.5mm t - worn sk. mod, Lt. fat, no molt

1112 ♂ " " 32gms. T - 6x4mm Lt. fat mod. cloacal protub. no molt sk. mod

17 July

1113 ♂ " " 31gms. T - 9x6mm mod. cloacal protub, sk. mod, no molt Lt. fat

1114 ♂ " " 33gms. T - 5x3mm, sk. mod, Lt. fat, Lt. cloacal protub. singing 50' from dead branch in tree w - 82.4mm t - 81.5mm no molt

1115 ♂ " " 29gms. T - 3x2mm Lt. fat, Lt. cloacal protub, sk. mod. singing molt: inner 1's

1116 ♀ " " 30gms. O - 4x2mm, Inactive brood patch, Lt. fat. - karyotype no tail (3 1/2" fragment) - no molt, wing worn, sk. mod. (ova < 1mm) no molt. (capitae)

1117 ♂ Mountain Bluebird 28gms. T - 4x2mm. Stom. - Formicidae coll. near sage

18 July 2mi. S, 1mi. W Woodford, 6000ft., Alpine Co. Calif. [T. 11N, R. 19E, SE 1/4 sec. 33]

1118 ♀ *Passerella iliaca* 30gms. O - 6x0mm (ova < 1mm) inactive inc. patch. sk. mod, Lt. fat, molt: inner 3, body + tail

R.M. Zink

1979

Catalog

1/2 mi. S, 1 mi. W Woodfords, 6100 ft., Alpine Co., Calif. [T. 11N, R. 19E, SE 1/4 sec. 33]

18 July

skeleton only

1119

♂

Passerella iliaca

29gms. T. - 3x2mm, lt. fat, sk. oss,

molt: inner primaries, lt. cloacal protub.

Imm.

1120

♂

"

"

31gms. T. - 1mm, sk. unoss, lt. fat

1/2 mi. W Hawkins Peak, 2360m, Alpine Co., Calif. [T. 10N, R. 19E, SW 1/4 sec. 5]

1121

♂

"

"

32gms. T. - 9x6mm, sk. oss, lt. fat, no molt,

mod. cloacal protub.

1122

♂

"

"

34gms. T. - 4x2mm, sk. oss, lt. fat, lt. cloacal protub.

no molt

1/2 mi. S, 1 mi. W Woodfords, 6100 ft., Alpine Co., Calif. [T. 11N, R. 19E, SE 1/4 sec. 33]

skeleton only

19 July

1123

♀

Passerella iliaca

26gms (no tail), O. - 9x4mm (ova < 1mm), sk. oss.

Inactive inc. patch, lt. fat, no molt

1124

♀

"

"

28gms. O. - 3x1mm, sk. unoss, lt. fat, no molt

1125

♂

"

"

32gms. T. - 4x2mm, lt. fat, lt. cloacal protub.

no molt, sk. oss

1126

♂

"

"

31gms. T. - 5x3mm, lt. fat, no molt, sk. oss.

wet - vom, lt. cloacal protub.

1127

♂

"

"

32gms. T. - 4x2mm, lt. fat, mod. cloacal protub.

sk. oss, no molt

1/2 mi. W Pickett Peak, 2400m, Alpine Co., Calif. [T. 10N, R. 19E, NE 1/4 sec. 5]

1128

♀

"

"

30gms. O. - 5x3mm (ova < 1mm)

Inactive inc. patch, lt. fat, sk. oss

1129

♂

"

"

30gms T. - 3x2mm

lt. cloacal protub., sk. oss

no molt, lt. fat

1130

♂

"

"

32gms. T. - 6x4mm, lt. fat, no molt

sk. oss, mod. cloacal protub.



R.M. Zink
1979

Catalog

1/2 mi. W Pickett Peak, 2400m, Alpine Co. Calif. (T. 10N, R. 19E, sec. 5) NE 1/4

20 July

- 1131 ♀ *Passerella iliaca* 34gms. mod. active brood patch, sk. os, o. - 5x3mm (ova < 1mm), lt. fat, no molt
- 1132 ♂ " " w-79.0mm t-81.7mm 29gms. T₁-1mm, sk. unoss, lt. fat, no molt, skeleton only
- 1133 ♂ " " 34gms. T₁-7x4mm mod. cloacal protub. sk. os, lt. fat, no molt
- 1134 ♂ " " 35gms. T₁-4x2mm, sk. os, lt. cloacal protub. lt. fat, molt: inner 1°
- 1135 Juv. ♀ " " w-77.0mm t-82.25mm 31gm. o. - 2x1mm, sk. unoss, lt. fat, skeleton only Coll. L.M. CONROY
- 1136 Juv. ♂ " " 32gms. T₁-1mm, sk. unoss, lt. fat, body molt, skeleton only Coll. L.M. CONROY
- 1137 Juv. ♀ " " 31gms. o. - 2x1mm, lt. fat, sk. unoss, Coll. L.M. CONROY
- 1138 ♂ " " 31gm. T₁-3x2mm lt. fat, sk. os, no molt, Coll. L.M. CONROY
- 1139 ♂ " " 30gms. T₁-exam, sk. os, lt. fat, no molt, w-77.9mm t-81.1mm, skeleton only Coll. R.M.Z.
- 1140 ♂ " " 35gms. T₁-6x4mm, sk. os, mod. cloacal protub. lt. fat, no molt, singing Coll. R.M.Z.
- 1141 ♂ " " w-80.6mm t-86.9mm, lt. cloacal protub. lt. fat, sk. os, molt: inner 1°, back, upper tail coverts, T₁-2x1mm, skeleton only Coll. R.M.Z.
- 1142 ♂ " " 30gms. T₁-4x2mm, sk. os, lt. fat, no molt, lt. cloacal protub.



R.M. Zink
1979

Catalog

1/2 mi. W Pickett Peak, 2400m, Alpine Co. Calif. (T. 10N, R. 19E, sec. 5) NE 1/4

20 July

- 1131 ♀ *Passerella iliaca* 34gms. mod. active brood patch, sk. os, o. - 5x3mm (ova < 1mm), lt. fat, no molt
- 1132 ♂ " " w-79.0mm t-81.7mm 29gms. T₁-1mm, sk. unoss, lt. fat, no molt, skeleton only
- 1133 ♂ " " 34gms. T₁-7x4mm mod. cloacal protub. sk. os, lt. fat, no molt
- 1134 ♂ " " 35gms. T₁-4x2mm, sk. os, lt. cloacal protub. lt. fat, molt: inner 1's
- 1135 Juv. ♀ " " w-77.0mm t-82.25mm 31gm. o. - 2x1mm, sk. unoss, lt. fat, skeleton only Coll. L.M. CONROY
- 1136 Juv. ♂ " " 32gms. T₁-1mm, sk. unoss, lt. fat, body molt Coll. L.M. CONROY
- 1137 Juv. ♀ " " 31gms. o. - 2x1mm, lt. fat, sk. unoss Coll. L.M. CONROY
- 1138 ♂ " " 31gm. T₁-3x2mm lt. fat, sk. os, no molt Coll. L.M. CONROY faint
- 1139 ♂ " " 30gms. T₁-exam, sk. os, lt. fat, no molt w-77.9mm t-81.1mm faint
- 1140 ♂ " " 35gms. T₁-6x4mm, sk. os, mod. cloacal protub. lt. fat, no molt w-80.6mm t-86.3mm faint
- 1141 ♂ " " w-80.6mm t-86.3mm, lt. cloacal protub. lt. fat, sk. os, molt: inner 1's, back, upper tail coverts, T₁-2x1mm, ventral body faint
- 1142 ♂ " " 30gms. T₁-4x2mm, sk. os, lt. fat, no molt, lt. cloacal protub. faint



R. M. Zink
1979

Catalog

2 mi. N, 1 mi. W Duane Bliss Pk. 2130m, Douglas Co. Nevada [T. 14 N, R. 19 E, NW 1/4 sec. 6]

21 July

1143 ♂ ^{skeleton only} *Passerella iliaca* ^{t. - w/} 31gms. T. - 4x2^{mm}, ^{w - w/} lt. cloacal protub., lt. fat

1144 ♂ ^{skeleton only} " 34gms. T. - 4x2^{mm}, ^{w + t - w/} lt. cloacal protub., ^{+ body} molt inner 1st, sk. oss, lt. fat,

1145 ♂ " 34gms. T. - 2x1, ^{molt: inner 1st, sk. oss.} mod. fat, lt. cloacal protub.

22 July

1146 ♂ " 28gms. T. - 2x1^{mm}, ^{no cloacal protub.} sk. oss, lt. fat, molt: inner 1st, body

1147 ♂ ^{skeleton only} " 32gms. T. - 3x2^{mm} ^{w - 76.7mm t - molt} lt. fat, sk. oss, ^{molt: inner 1st, ta: 1, no cloacal protub} body

1148 ♂ ^{skeleton only} " 32gms. T. - 3x2^{mm} ^{w - 77.9mm t - 82.2mm} lt. fat, sk. oss, ^{molt: inner 1st no cloacal protub} + back (back only)

1149 ♂ " 33gms T. - 3x2^{mm}, ^{molt: inner 1st} sk. oss, lt. fat, lt. cloacal protub.

1150 ♀ " 28gms. O. - 5x3^{mm} (largest ovum = 1mm), ^{essentially inactive inc. batch, no molt} sk. oss, lt. fat

Carson City Corp. Bay.
2 1/2 mi. N, 1 mi. W Duane Bliss Pk. 2050m, ~~Douglas Co.~~ Nevada [T. 15 N, R. 19 E, SW 1/4 sec. 31]

1151 ♂ " 30gms. T. - 2x1^{mm}, lt. fat, lt. cloacal protub., sk. oss, ^{molt: lt. body, inner 1st wing coverts}

1152 ♂ ^(COLL. WHILE SINGING - POOR REPRODUCTION, TOO) " 30gms. T. - 3x2^{mm}, ^{no molt} sk. oss, lt. fat, lt. cloacal protub.

1153 Imm. ♂ " 29gms, ^{lt. fat, sk. unoss, body molt} t. - 1mm.

R. M. Zink
1979

Catalog

1 1/2 mi. S Sugar Hill, 1850m, Modoc Co, Calif. [T. 46N, R. 14E, SW 1/4 sec. 35].

23 July

1154 ^{Imm} ♂ *Passerella iliaca* 29gms T. 1mm, lt. fat, sk. unoss,

1155 ♂ " " 32gms T. 4x2mm, lt. fat, mod. cloacal protub. ^{sk. oss, molt: inner 10's}

24 July

1156 ♂ " ^{5 imm} " 30gms T. 4x2mm, lt. fat, mod. cloacal protub. ^{sk. oss, no molt, lt. fat.}

1157 ♂ " " 35gms T. 4x2mm, lt. fat, sk. oss, lt. cloacal protub. ^{skeleton only, molt: inner 10's, center retrics, body}

1158 ♀ " " 29gms T. 4x2mm (ova < 1mm), lt. fat, inactive brood patch ^{sk. oss, no molt}

1159 ♂ " " 32gms T. 4x2mm, lt. fat, mod. cloacal protub, lt. fat ^{no molt}

1160 ♂ " " 30gms T. 3x1mm, lt. fat, no cloacal protub. ^{no molt}

1161 ♂ " " 30gms T. 2x1mm, molt: inner 10's, tail, body, sk. oss, lt. fat ^{w + t = worn, no cloacal protub.}

1162 ♂ " ^{call. L.M. coming} " 33gms T. 1mm, sk. oss, molt: inner 10's, tail, body ^{w + t = worn, lt. fat, no cloacal protub.}

25 July

1163 ♂ " " 31gms T. 3x2mm, lt. fat, sk. oss, no cloacal protub. ^{skeleton only, no molt w + t worn}

1164 ♀ " " 28gms O. 5x3mm (ova < 1mm), sk. oss, inactive brood patch ^{w 75.2mm t 80.7mm, lt. fat, no molt}

1165 ♂ " " 34gms T. 2x1mm, lt. fat, body molt, no cloacal protub. ^{sk. oss, inner 10's}

1166 ♀ " " 28gms O. 4x2mm, inactive brood patch, sk. oss, no molt ^{lt. fat, ova < 1mm, cloacal}



R. M. Ziolk
1979

Catalog

1 1/2 mi. S Sugar Hill, 1850m, Modoc Co., Calif. [T. 46N, R. 14E, SW 1/4 sec. 35]

25 July

skeleton only

coll. L. M. Conroy

w-93mm, t-76.2mm, mod fat, no molt

1167 ♀ Black-headed Grosbeak 45gms. O. - exam, inactive brood patch, sk. oss

skeleton only

coll. L. M. Conroy

w-77.0mm, t-77.9mm, sk. oss, lt. fat, no molt

1168 ♀ Passerella iliaca 30gms. O. - 5x3mm (ova < 1mm), inactive brood patch

coll. L. M. Conroy

mod. active brood patch

1169 ♀ " " 31gms. O. - 7x5mm (largest ova ≤ 1mm), lt. fat, sk. oss, no molt

skeleton only

Imm. used for karyotype

w-77.35mm, t-82.0mm

1170 ♂ " " captive T. - 1mm, sk. unoss, lt. fat, molt: tail, body (into adult)

1 1/2 mi. S, 3/4 mi. E Sugar Hill, 1850m, Modoc Co., Calif. [T. 46N, R. 14E, SE 1/4 sec. 35]

skeleton only

inactive brood patch, w+t - none, sk. oss, lt. fat

1171 ♀ " " 30gm. O: 5x3mm (lgst. OVUM < 1mm), molt: inner 1/3 tail, body

Coll. L. M. CONROY

no molt

1172 ♂ " " 30gm. t: 4x2mm, sk. oss, lt. fat, no cloacal protub.

1 1/2 mi. S Sugar Hill, 1850m, Modoc Co., Calif. [T. 46N, R. 14E, SW 1/4 sec. 35]

Imm. DIED IN NET - NO TISSUES TAKEN

1173 ♂ " " 30gm t: 1mm x 1mm, lt. fat, body molt, sk. unoss

skeleton only

carrying food

w+t - none, lt. fat, no molt

1174 ♀ " " 30gms. O. - 4x2mm (ova < 1mm), inactive brood patch, sk. oss

26 July

skeleton only

w-81.3mm, t-83.8mm, lt. fat, no cloacal protub.

1175 ♂ " " 30gms, T. - 3x2mm, sk. oss, molt: body

1 1/2 mi. S, 3/4 mi. E Sugar Hill, 1850m, Modoc Co., Calif. [T. 46N, R. 14E, SE 1/4 sec. 35]

skeleton only

w-80.5mm, t - none

1176 ♂ " " 31gms. T. - 3x2mm, no cloacal protub., sk. oss, lt. fat

no molt, sk. oss, no cloacal protub.

1177 ♂ " " 33gms. T. - 3x2mm, lt. fat

sk. oss, lt. fat, no cloacal protub.

1178 ♂ " " 30gms, T. - 3x2mm, molt: inner 1/3, body

lt. cloacal protub.

1179 ♂ " " 32gms, T. - 3x2mm, lt. fat, no molt, sk. oss



R. M. Zink
1979

Catalog

1 1/2 mi. S Sugar Hill, 1850m, Modoc Co. Calif. [T. 46N, R. 14E, SW 1/4 sec. 35]

26 July

skeleton only - used for chromosome analysis w-938mm t-72.3mm

1180 ♂ Western Tanager 24gms. T. 4x2mm, sk. oss, lt. fat

1181 ♂ Williamson Sapsucker 47gms. T. 1mm, lt. fat. Molt: body

1 1/2 mi. S 3/4 mi. E Sugar Hill, 1850m, Modoc Co. Calif. [T. 46N, R. 14E, SE 1/4 sec. 35]

27 July

1182 ♂ *Passerella iliaca* 32gms. T. 3x2mm, lt. fat, sk. oss, no cloacal protub.

1183 ♀ " " 31gms. O. 4x2mm ^{light body molt (ova < 1mm)} inactive brood patch, sk. oss, lt. fat

1184 ♂ " " w-80.8mm, t-1 feather remaining, sk. oss, lt. fat, no cloacal protub.
33gms. T. 3x2mm molt: tail, body, inner 1/3

1185 ♀ " " w-75.9mm, t-79.8mm, molt: upper tail coverts, lt. fat
30gms. O. 4x2mm (ova < 1mm), sk. oss, inactive brood patch

1 1/2 mi. S Sugar Hill, 1850m, Modoc Co. Calif. [T. 46N, R. 14E, SW 1/4 sec. 35]

1186 ♀ " " 28gms. O. 4x2mm (ova < 1mm), sk. oss, no molt, lt. fat. ^{inactive brood patch}

4 mi. N, 3 mi. W Warren Peak, 1770m, Modoc Co., Calif. [T. 42N, R. 15E, NW 1/4 sec. 31]

28 July

1187 ♀ *Lasionyxteris noctivagans* 10gms. 190-35-8-13 $\approx$ 10gms. ^{well developed protruding mammae (under arm pits)}

2 mi. S, 1 mi. W Cedar Mtn., 1730m, Modoc Co. Calif. [T. 43N, R. 15E, SW 1/4 sec. 29]

29 July

1188 ♂ *Passerella iliaca* 30gms. T. 2x1mm, sk. oss, lt. fat, no cloacal protub. ^{no molt}

1189 ♀ " " 30gms. molt: inner 1/3 tail (1/2 grown), body. Sk. oss, ^{Inactive brood patch. O. - exam, lt. fat}

R. M. Zink
1979

Catalog

2 mi. S, 1 mi. W Cedar Mtn., 1830m, Modoc Co., Calif. [T. 43 N, R. 15 E, SW 1/4 sec 29]

30 July

1190

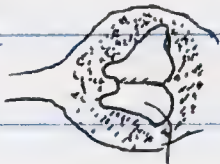
♂ *Empidonax difficilis*

lt. fat, no molt

11gms T. 5x3mm

no trunk skel.

shot along stream w/ White Fir, Yellow Pine, Cottonwood



no cloacal protuber.

5x3mm noose area

~~7 mi. N, 5 1/2 mi. E Lassen Peak,~~

~~8 mi. N, 6 mi. W Do~~ 6 1/2 mi. N, 7 mi. E Lassen Peak, 7800ft., Shasta Co., Calif. [T. 38 N, R. 5 E, 35] SE 4 sec.

31 July

skeleton only

1191

♀

Passerella iliaca

inactive brood patch, molt: inner 1/3, tail, body

35gms. O. 4x2mm, lt. fat, sk. oss

skeleton only

1192

♂

"

"

sk. oss, lt. fat, no cloacal protuber.

34gms. T. 1mm. molt: inner 1/3, body, tail

skeleton only

1193

♀

"

"

inactive brood patch, molt: inner 1/3, body, tail

32gms. O. 1.5x3mm (conclusion), sk. oss, lt. fat,

skeleton only

1194

♀

"

"

molt: inner 1/3, body, tail, sk. oss, lt. fat

33gms. O. 4x2mm (conclusion), inactive brood patch

skeleton only

1195

♂

"

"

no cloacal protuber., lt. fat, sk. oss

32gms T. 2x1mm. molt: body, 1/3, tail

skeleton only

1196

♂

"

"

sk. oss, lt. fat, no cloacal protuber.

34gms. T. 2x1mm, molt: body, 1/3, tail

skeleton only

1197

♀

"

"

lt. fat, sk. oss, inactive brood patch, body molt

36gms. O. 4x2mm (conclusion)

skeleton only

1198

♂

"

"

molt: inner 1/3, tail, body, sk. oss, lt. fat

34gms T. 2x1mm, no cloacal protuber.

1199 Imm. ♀

"

"

sk. unoss

29gms. O. 2x1mm mol. fat, body molt

skeleton only

1200

♂

"

"

1 August

singing from fir (25') 1/2 mi. S, 1 mi. W Cedar Mtn., 1830m, Modoc Co., Calif. [T. 43 N, R. 15 E, SW 1/4 sec 29] molt: inner 1/3, tail, body, no cloacal protuber.

34gms. T. 3x2mm, sk. oss, lt. fat

skeleton only

1201

♀

"

"

inactive brood patch, sk. oss

29gms. O. 4x1mm, lt. fat



R.M. Zink

1979

Catalog

6 1/2 mi. N, 7 mi. E Lassen Peak, 7800 ft., Shasta Co., Calif.

1 Aug.

537 skeleton only, 1202 ♀ *Passerella iliaca* 32gms. O.-4x2mm (ova < 1mm), molt: inner 10's, tail, body, sk. oss, inactive brood patch

538 skeleton only, 1203 ♀ " " 31gms. O.-3x1mm, molt: fat, body molt, sk. unoss. (into adult)

539 skeleton only, 1204 ♀ " " 28gms O.-2x1mm, sk. unoss, lt. fat, body molt

544 skeleton only, 1205 ♂ " " 32gms T.-2x1mm, molt: inner 10's, sk. oss, lt. fat, no cloacal protub. 7 mi. N, 5 1/2 mi. E Lassen Peak, 5700 ft., Shasta Co., Calif. [T. 32 N, R. SE, NW 1/4 sec. 34]

545 skeleton only, 1206 ♀ " " 28gms O.-exam, lt. fat, sk. oss, inactive brood patch, no molt (very young)

546 skeleton only, 1207 ♀ " " 29gms. O.-6x3mm (ova < 1mm), lt. fat, sk. oss, inactive brood patch, molt: inner 10's

547 skeleton only, 1208 ♀ " " 28gms. O.-2x1mm, sk. unoss, no molt, lt. fat

548 skeleton only, 1209 ♂ " " 33gms. T.-2x1mm, sk. oss, lt. fat, no cloacal protub. molt: inner 10's, tail, 2/3 body

549 skeleton only, 1210 ♀ " " 34gms, O.-4x2mm (ova < 1mm), sk. oss, lt. fat, inactive brood patch, molt: inner 10's, tail, body

550 skeleton only, 1211 ♂ " " 33gms, T.-exam, molt: inner 10's, tail, body, sk. oss, lt. fat, no cloacal protub. 2 Aug

551 skeleton only, 1212 ♂ " " 32gms. T.-2x1mm, no cloacal protub., sk. oss, lt. fat, molt: inner 10's, body, tail

552 skeleton only, 1213 ♂ " " 33gms T.-3x2, sk. oss, lt. fat, no cloacal protub. molt: inner 10's, body, tail

553 skeleton only, 1214 ♂ " " 33gms. T.-2x1mm, no cloacal protub. molt: inner 10's, body (no tail), sk. oss, lt. fat

R. M. Zink
1979

Catalog

7 mi. N, 5 1/2 mi. E Lassen Peak, 5700 ft. Shasta Co. Calif. [T. 32 N, R. 5 E, NW 1/4 sec. 34]

2 Aug

skeleton only,
1215 ♀ *Passerella iliaca* 33 gms. O. - exam. ~~inactive brood patch~~ in active brood patch, lt. fat, sk. unoss, molt: inner 1/2, tail, body

skeleton only

1216 ♂ " " 26 gms. T. - 1 mm ~~mod~~ molt: light body, sk. unoss, lt. fat

1/2 mi. S, 2 1/2 mi. W Bald Mtn. 5400 ft. Fresno Co. Calif. [T. 10 S, R. 2 SE, N 1/4 sec. 4]

5 October

skin.

1217 ♀ " " 28 gms. O. 3 x 2 mm (not granular)

1218 ♂ " " 28 gms. T. - 1 mm

1 1/4 mi. E Ely Mtn. 2040 m, Fresno Co. Calif. [T. 9 S, R. 2 SE, SW 1/4 sec. 9]

6 October

1219 ♂ " " 34 gms. T. - 1 mm. ~~sk. unoss~~ sk. unoss, lt. fat,

1220 ♂ *Zonotrichia leucophrys* 26 gms. T. - exam. ^{molt: back} sk. unoss, lt. fat

7 October

1221 ♂ *Passerella iliaca* 34 gms. T. - 1 mm sk. unoss, lt. fat

1222 ♀ " " 30 gms. O. - 3 x 1 1/2 mm, sk. unoss, lt. fat

1223 *Zonotrichia atricapilla* 27 gms.

4 mi. S, 1 mi. E Hull Mtn. 750 m, Lake Co. Calif. [T. 19 N, R. 10 W, SW 1/4 sec. 36]

11 December

skel. only

1224 ♂ *Passerella iliaca* 31 gms. T. - 1 mm, ^{cf. *unalaschensis*} lt. fat; molt: tail

skel. only

1225 ♂ cf. "*townsendi*" 41 gms. T. - 1 mm, Mod. fat, no molt

R.M. Zink
1979

Catalog

4 mi. S, 1 mi. E Hull Mtn. 750m, Lake Co. Cal. [T. 19N, R. 10W, SW 1/4 sec. 36]
skel. only 1226 ♂ ^{cf. brevicauda.} *Passerella iliaca* ~~36.0~~ 38.0 gms., T. - 1mm., Lt. fat, no molt

12 December

1227 Varied Thrush 77 gms.

skel. only 1228 ♂ Hutton Vireo 11 gms. calling, no fat, no molt

1229 ♀ *Passerella iliaca* 34 gms. O. - 3x2mm, sk. unoss., mod. fat, no molt.

1230 ♀ " " 32 gms. O. - 4x2mm, sk. unoss., Lt. fat, no molt.

skel. only 1231 ♂ " ^{used for chromosomes} ^{tail molt} *cf. brevicauda* no wt., T. - exam, Lt. fat, ~~no~~

skel. only 1232 ♂ " ^{used for chromosome anal.} *cf. unalaschensis* no wt., Lt. fat, no molt, T. - exam

note: there are no RMZ #'s between
1232 and 1239, inclusive.

R. M. Zink

1980

Catalogue

Hotel El Tirol, 230m., 19.5 km. by road NNE Encarnación,
Dpto. Itapúa, Paraguay

31 January

1240

♂ *Pyrrhoxena ruficeps*

mouth gray, lower mandible blue-gray. tarsus + toes ^{blue-gray}
15.9 gms. T. - 1mm, sk. oss, lt. fat, molt: body, outer primaries + secondaries
iris - dk. brown

1 February

1241

♀ *Piaya cayana*

bill pale green, iris brown, eyelid - purplish-pink, legs + feet blue-gray
toe pads tan
10.9 gms. O. - ? Lt. fat sk. oss?
stom. - 4 large orthopteran

1242

♀ *Vireo olivaceus*

legs + feet gray, toe pads light tan, iris brown, lower mandible light blue
14.0 gms. O. - 3 x 1mm (not granular), sk. oss, lt. fat

1243

♀ *Thamnophilus caeruleus*

legs + feet gray, toe pads light tan, iris brown, lower mandible gray blue. Molt: body, outer primaries + secondaries
17.3 gms. O. - 6 x 3mm (ova 1mm), sk. oss, lt. fat

1244

♂ *Hypodaleus guttatus*

legs + feet gray, toe pads tan, iris brown, molt: body, inner primaries
40.5 gms. T. - 4 x 2mm, sk. oss, lt. fat,
lower mandible blue, upper mandible black with blue streak
1mm wide just above cutting edge. stom. - orthopteran remains, 7 sm. greenish spheres

1245

♀ *Tityra cayana*

iris brown, mouth orange, lower mandible pink basally
legs - slate gray, toe pads light green
82.0 gms. O. - 4 x 2mm (ova 1mm), sk. 1/2 unoss, ~~mod~~ heavy fat

2 Feb.

1246

♂ *Basilentus culicivorus*

iris brown, legs + feet - brown-yellow, toe pads yellow
mouth lining - flesh
9.2 gms. T. - 1mm - sk. oss. lt. fat
singing, stom. - insect remains

1247

♂ *Euphonia pectoralis*

iris brown, legs + feet gray-green, toe pads green
13.4 gms. T. - 5 x 3mm. sk. oss. Intest. track empty
lower mandible blue-gray, mouth - yellow-orange
molt: body, inner primaries

R.M. Zink

1980

Catalogue

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto.

Itapúa, Paraguay

2 Feb. (cont)

1248 ♂ *Sittasomus griseicapillus* 12.7gms. T.-1mm, sk. ass. lt. fat, stom.-insect remains.
iris-dk. brown, mouth pink, lower mand. b.-light gray
legs+feet blue-gray, toe pads same, except for
tan patches at joints.

1249 ♀? *Lepidocolaptes fuscus* 18.5gms. O.-?, sk. unoss. lt. fat. Body molt
upper mandible blackish-brown, lower man. pale ^{white}
iris brown, mouth-peach
legs+feet greenish, toe pads bright greenish
stom.-insect remains.

1250 ♂ *Mackenziaena severa* 53.5gms. T.-3x1.5mm, lt. fat, molt: body, central primaries
iris brown, mouth greenish-yellow. sk. windows posterior
stom.-coleoptera & other insect remains
Bill black, legs+feet blue-gray, toe pads ^{bright} green

1251 ♀ *Mackenziaena leachii* 71.5gms. O.-6x3mm (immature), sk. windows 3mm pastured
iris brown, mouth-pearl, legs+feet black, toe pads green
upper mandible black, lower mandible gray distally
(black proximally). lt. fat. molt: light body, inner primaries
stom.-coleoptera & orthoptera remains

1252 ♂ *Geotrygon violacea* 100gms. T.-4x2mm, ad. skull lt. fat, molt: body
iris gold, flesh around eye purplish red, toe pads flesh
mouth pink, stom.-fruits
Bill red with purplish tinge, legs+feet red-purple

1253 ♂ *Hemithraupis guira* 14.0gms. T.-7x5mm, sk. ass. lt. fat, stom.-fruit remains
3 Feb. ^{slate}
legs+feet gray, toe pads lt. green, iris dk. brown,
lower mandible yellow-green
molt: body, inner primaries, secondaries

1254 ♂ *Conopophaga lineata* 23.0gms. T.-3x2mm, no fat, no molt
legs+feet olive-brown, toe pads pale green-olive
iris brown, lower mandible ^{basally} white
sk. juv. stom.-insect remains, prey. NKT

1255 ♀ *Hylocharis chrysura* 2.9gms. O.-3x2mm (under 4.), lt. fat. stom.-insect parts
legs+feet black, toe pads lt. green, lower mandible pink-red
iris dk. brown, mouth yell.-green
molt: body, primaries & secondaries

1256 ♀ *Veniliornis spilogaster* 39.3gms. OV.-6x4mm (ova < 1mm). No fat
legs+feet green, toe pads light green, iris-dk. brown
lower mandible lt. gray
molt: body, tail, inner primaries.

R.M. Zink

1980

Catalogue

Hotel El Tirol, 230 m., 19.5 km. by road NNE
Encarnación, Dpto. Itapúa, Paraguay

4 Feb.

- 1257 ♀ *Falco sparverius* 122 gms. O. - 8x4 mm (ova 1 mm), stom. - large orthopteran remains
iris brown, skin around eye + cere yell.-green (brighter yell. in front of eye). legs + feet yell.-orange. Lt. fat.
Bill dk. gray, lighter basally. Molt: body, tail, outer primaries.

- 1258 ♀ *Dryocopus lineatus* 207 gms. O. - 9x4 mm (ova 1 mm), Lt. fat. Stom. - ants + fruits.
iris white, lower mandible ^{dk.} gray-green (lighter medially)
legs + feet gray, toe pads greenish tan
molt: body, outer primaries, secondaries, central retrices

- 1259 ♀ *Philydor rufus* 258 gms. O. - 3x2 mm (not granular), st. unass. No fat.
bill black (lower mandible tinged with brown), iris dk. brown
legs + feet olive-green, toe pads tan, mouth light green
stom. - orthopteran remains. Light body molt.

- 1260 ♂ *Tachyphonus coronatus* 28.5 gms. T. - 8x4 mm (sl. cloacal protub.), st. oss.
iris brown, lower mandible blue-gray (black distally)
legs + feet black, toe pads green, mouth pink
Lt. fat. molt: body, inner primaries, wing coverts
stom. - insect + fruit remains.

- partial skin (head, foot, wing) 5 Feb.
1261 ♂ *Coragyps atratus* 173.5 gms. T. - 4x2 mm. Molt: body, tail, wing
iris brown. Mouth - green (tinged w/ white).
tail - 172 mm. Bill - black, green distally
legs + feet - black dorsally to green on sides. toe pads brown

- 6 Feb.
1262 ♀ *Parula pitiauyumi* 25 gms. O. - 2x1 mm (clear), st. unass. No fat. stom. - insects
iris brown, legs dk. brown, feet tan (brighter on toe pads)
lower mandible pale yellow, mouth light green
molt: body

- 1263 ♂ *Cyanocompsa cyanea* 23.2 gms. T. - 5x2 mm (sl. 12x7 mm), st. oss. No fat.
iris brown, legs + feet black, toe pads light green
lower mandible light gray basally. Stom. - seeds
molt: out a primary on left

- 1264 ♂ *Aramides saracura* 460 gms. T. - 5x2 mm, Lt. fat. stom. - insects.
iris pale green, bill olive green (brighter basally)
legs + feet purple, mouth whitish-gray
molt: body, inner primaries

R.M. Zink

1980

Catalogue

Hotel El Tirol, 230m, 19.5 km. by road IVNE Encarnación, Dpto. Itapúa, Paraguay

6 Feb. (cont.)

- 1265 ♂ *Syrigma sibilatrix* 490 gms. T. - 7x3mm, Lt. fat. Stom. - Orthopteran remains
iris white, Bill - distal 1/3 black, proximal 2/3 pink
mouth & inside of bill pink. Molt: body, outer primaries & secondaries.
legs + feet black. bare skin around eye (to bill) ^{powder} blue

7 Feb.

- 1266 ♂ *Trogon surrucura* 65.5 gms. T. - 4x2mm. No fat. Molt: body, tail, central primaries & secondaries
iris brown, eye ring orange, bill lt. green.
Stom. - fruit remains
legs + feet dk. blue-gray (→ slate gray), toe pads lt. green

- 1267 ♀(?) *Colaptes campestris* 160 gms. O. - 8x4mm (ova indistinct), stom. - ants.
molt: body, central primaries.
iris brown, bill black, legs + feet olive green

- 1268 ♀ *Guiraca guiraca* 128 gms. O. - 10x5mm (largest ovum = 2mm), No fat.
bare skin around eye yall-green. legs pinkish-green, feet olive-green
molt: tail, body, stom. - insects (Coleoptera, + ?)

- 1269 ♀ *Milvago chimachima* 295 gms. O. - 10x5mm (largest ovum 2mm). Lt. fat
iris brown. Bill - white tinged with green
molt: outer primaries, tail, body, outer secondaries
skin around eye + cere - white tinged with blue
legs + feet - white tinged with green.

8 Feb

1270 ♂ *Euphonia*

bill light blue-gray, black distally. iris brown
Molt: central primaries, outer secondaries
10.3 gms. T. - 5x3mm. No fat. sk. oss.
legs + feet slate gray-black. Toe pads light green

- 1271 ? *Automolus leucophthalmus* no wt. gonads not found. sk. unoss. molt: body, tail
lower mandible lt. gray green. Toe pads tan
upper " dk. brown. No fat.
iris - whitish green, legs + feet olive green

- 1272 ♀ *Otus choliba* 140 gms. O. - 11x5mm (largest ovum = 1.5mm), Lt. fat
feet pale green (toe pads lighter)
stom. - orthopteran remains. Molt: body, outer primaries & outer secondaries
iris yellow. Bill pale gray green (upper mand. yellow tip)

My
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Catalogue

Hotel El Tirol, 230m., 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay

8 Feb. (cont)

1273 ♀ *Pionus maximiliani*

iris brown. 15-11-yellow (black base to upper mandible)
275 gms. O. - 12x6 mm (largest ovum 2 mm). Lt. fat.
legs + feet black, toe pads green. Molt: body, outer primaries + secondaries
crop + stom. - corn &

9 Feb.

1274 ♂ *Colonia colonus*

iris brown. bill black. legs + feet black.

15.5 gms. T. - 1 mm. sk. oss. Lt. fat. stom. - insects
toe pads gray-green. Molt: body, tail, central prim-
aries, outer secondaries

1275 ♂

"

"

iris brown. legs + feet black. toe pads gray-green.
16.5 gms. T. - 1 mm. 2 small posterior skull windows.
bill black. Mouth yell. green. Lt. fat
stom. - insect remains (Coleoptera, +?)
molt: body

1276 ♀ *Phylloscartes*

bill black. iris brown. legs + feet slate gray
7.0 gms. O. - 4x3 mm (lgst. ovum 1 mm).
toe pads lt. green. mouth yell. orange
sk. oss. No fat. Molt: body, 7th primary.

1277 ♀ *Thamnophilus caeruleus*

legs + feet gray (some bluish), iris brown.
19.5 gms. O. - 5x2 mm (ova 1 mm) - post breeding ovary.
lower mandible blue-gray. toe pads gray-green.
sk. 7/8 unoss. Lt. fat. stom. - insects (Coleoptera, +?)

10 Feb.

1278 ♀ *Conopophaga lineata*

iris brown, lower mandible dull white
20.5 gms. O. - 3x1 1/2 mm (immature). No fat.
legs + feet olive brown, toe pads olive-green
mouth orange, upper mandible black
sk. - oss. (2 possible posterior windows).
molt: body

11 Feb.

1279 ♂ *Pyriglena leucoptera*

Bill black. iris red. legs + feet black, toe pads grn.
30.5 gms. T. - 9x4 mm. sk. oss. Lt. fat.
mouth - orange-red.
Molt: body, tail, outer primaries.



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Catalogue

Hotel El Tiro, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

11 Feb. (cont)

1280 ♂ *Volatinia jacarina* 10.5 gms. T.-6x4mm. sk. oss. Lt. fat. Molt: body
lower mandible blue, iris brown.
legs + feet black, stom. - small seed remains.

1281 ♂ *Colaptes cafer* 160 gms. T.-4x2mm. Lt. fat. Molt: body, tail, outer
iris brown. Bill black.
legs + feet olive green. | primaries + inner secondary.

12 Feb

1282 ♀ *Milvago chimachima* 330 gms. O.-9x5mm (ova $\leq$ 1mm), Lt. fat.
iris brown, legs + feet white tinged w/ green
skin around eye + cere - flesh (pale)
bill pale yellow-green (gray $\frac{1}{2}$ in. along tomium).
stom. - ~~fruit~~, insect, hair, large ticks
Molt: body

13 Feb.

1283 ♀ *Turdus rufiventris* 68 gms. O.-5x2 (undevel.) sk. unoss. ~~no~~ fat.
iris brown, skin around eye orange
mouth orange, legs + feet olive gray
lower mandible yell-green. Molt: body

14 Feb

1284 ♂ *Myiodynastes maculatus* 45 gms. T.-3x1mm. sk. mostly unoss. coll. NKJ
iris brown, bill black, stom. - fruit + insect remains
legs + feet black, toe pads lt. green
Body molt. ~~fat~~

15 Feb.

1285 ♂ *Coryphospingus cucullatus* no wt. T.-5x3mm, no fat, sk. oss., stom. - empty
iris brown, lower mandible dull blue-gray
legs + feet black, toe pads lt. green
molt:

1286 ♂ *Melanerpes candidus* 120 gms. T.-4x2mm, lt. fat. Molt: body, tail, ^{inner} secondary
Bill black, iris white, bare skin around eye bright yellow
legs + feet olive green (brownish tinge in places)
toe pads lighter.
stom. - insects (ads. + larvae)

1287 ♀ *Myiodynastes maculatus* 57 gms. O.-7x3mm (ova $\leq$ 1mm, devel.)
iris brown, bill black, legs + feet black, toe pads gray
lower mandible lighter basally, mouth flesh
HEAVY FAT. stom. - fruit. sk. oss.

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Hotel El Tirol, 230 m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa,
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15 Feb. (Cont.)

1288 ♂ *Myiornis auricularis*

iris red-brown, bill black (lower mandib. w/ some yell.)

5.4 gms. T.-1mm, sk. mostly unoss (post. $\frac{2}{3}$ unoss.)
legs + feet pinkish green, mouth dull yell.-green
no fat. molt: body, outer primaries.

1289 ♀ *Pyriglena leucoptera*

iris red, lower mandible blue-gray, mouth yell.-green
23.5 gms. O.-5 x 3mm (ova < 1mm, devel.), sk. oss.
legs + feet blue-gray, toe pads green, lt. fat.
molt: body, tail, central primaries, secondaries
stom.-insects. netted in forest.

16 Feb.

1290 ♂ *Thamnophilus ruficapillus*

iris red-orange, upper mandib. - black

21 gms. T.-4 x 2mm, sk. oss, no fat
lower mandib. blue-gray, mouth pale yell.-grn.
legs + feet slate gray (tinged w/ blue), toe pads lt. grn.
molt: body
stom.-insects

1291 ♀

Veniliornis spilogaster

iris brown, legs + feet olive-grn. (toe pads lighter)

37.5 gms. O.-4 x 2mm (undevel.), molt: body, tail
lower mandib. gray, upper mand. black
mouth pinkish green
stom.-insects, no fat

1292 ♂

Piaya cayana

iris red-brown, bill pale green, mouth deep red-purple
118 gms. T.-3 x 1mm, sk. oss, no fat, stom.-mantis (60mm)
legs + feet blue-gray, toe pads tan. Molt: ~~outer prim.~~
eyelid + skin around eye red-purple
outer prim.
tail

1293 ♀

Basileuterus leucoblepharus
netted in forest

iris brown, bill black, mouth pink flesh
14.3 gms. O.-3 x 2mm (undevel.), sk. oss., lt. fat.
legs lt. olive-brown, feet lighter
toe pads yell.-grn.
lt. body molt. stom.-insects

17 Feb.

1294 ♂

Turdus albicollis

iris brown, eyelid orange, mouth yell.-orange
64.5 gms. T.-1.5 x 1mm, sk. unoss, lt. fat. stom.-fruit
lower mandible pale yell.-green (black distally)
legs + feet - dk. gray-brown, toe pads tan
molt: body, outer primaries.

1295 ♀

Turdus rufiventris

iris brown, eyelid yell.-orange, mouth yell.-grn.
72 gms. O.-7 x 3mm (undevel.), sk. unoss, lt. fat.
lower mandib. pale yell.-grn, legs slate gray, feet olive grn
toe pads lt. tan. Molt: body, stom.-fruits.

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Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay

17 Feb. (cont.)

1296 ♂ *Icterus cayanensis* 29.5 gms. T.-1mm, sk. unoss. lt. fat. stom. - insects + fruit
tue pads lt. green, mouth pale greenish flesh
molt: body, tail.

1297 ♂ *Pitangus sulphuratus* iris brown, bill black, legs + feet black.
56.5 gms. T.-3x1mm, no fat., stom. - insects
tue pads olive-brown, mouth + gape yell.-green
molt: body, tail, central primaries

18 Feb.

1298 ♂ *Furnarius rufus* 52.8 gms. T.-1mm, sk. unoss. ^{mostly} no fat. molt: body
mouth pale flesh blue, legs + feet slate gray-brown
tue pads tan. stom. - insects (Formicidae, +?)

1299 ♂ *Spodophila caerulea* iris brown, bill lt. green-yell., mouth pale red-brown
8.8 gms. T.-9x5mm, full cloacal protub. sk. oos.
legs + feet slate gray, tue pads tan, no fat.
Stom. - seeds. no molt.
Singing from small shrub in shrubby pasture

1300 ♂ *Synallaxis ~~aspix~~* iris dull white, lower mandible blue-gray
12.5 gms. T.-1mm, sk. unoss. lt. fat. molt: tail.
legs + feet olive green, tue pads lt. green
mouth pale flesh. stom. - insects.

1301 ♀ *Zonotrichia capensis* iris brown, lower mandib. - dull gray-green
no wt. O.-2x1mm (undul.), sk. unoss. no fat.
upper mandib. dk. brown, legs + feet brown, tue pads tan
mouth flesh. Molt: body, tail, ~~upper~~ ^{central} second.
stom. - seeds.

1302 ♂ *Volatinia jacarina* iris brown, lower mandible dull gray-blue
8.8 gms. T.-1mm, sk. unoss. no fat.
legs + feet dk. brown, tue pads tan, mouth dull yellow
underwing linings white. stom. - seeds

1303 ♂ *Thamnoh. caerulea* (retted) iris brown, lower mandib. blue-gray
17.5 gms. T.-8x4mm, sk. oos. no fat.
legs + feet blue-gray, tue pads tan
mouth ochre. molt: tail outer primaries, body
stom. - insect remains.

skeleton only

1304 ♀ *Passerina cyanea* (retted) iris dk. brown, bill black, mouth flesh
20.8 gms. O.-5x3mm (ova < 1mm), no fat. stom. - seeds
legs + feet black, tue pads lt. gr.
ex. - 235mm TL - 168mm molt: body, central primaries
tail = 69mm, wing = 75mm (chord)

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Catalogue

Hotel El Tiro, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay

19 Feb.

1305 ♂ *Megarhynchus pitangus* 61.5gms. T.-4x2mm, ad. sk, lt. fat.
iris dk. brown, bill black, mouth flesh-pink
legs + feet black, toe pads pale green
stom. - ants, Coleoptera + other insects.
molt: body, outer primaries, central secondaries

1306 ♀? *Icterus cayanensis* 29.5gms. O-? sk, unoss, lt. fat, stom. - insects
iris red brown, bill black, mouth pale white-yellow
legs + feet blue-gray, toe pads lt. green.
molt: lt. body

1307 ♂ *Synalaxis spixi* 10.0gms. T.-4x2mm sk, mostly unoss, no fat.
iris red-brown, bill black, mouth slate gray-black.
legs + feet gray tinged bluish, toe pads flesh green
molt: body, outer primaries, stom. - insects

1308 ♂ *Thamophilus caeruleus* 18.5gms. T.-6x3mm posterior sk, windows
iris brown, lower mandible blue-gray
mouth ochre, legs + feet blue-gray, toe pads
lt. green. stom. - insect. lt. fat.
molt: body, tail

1309 ♀ *Trichothraupis melanops* 22.4gms. O.-5x3mm (ova ≤ 1mm), sk. ass, lt. fat.
~~*Tangara setacea*~~
iris brown, lower mandible lt. blue-gray, mouth lt. green
legs gray-blue, toe pads lt. green. Olt brood patch.
molt: body, inner primaries

1310 ♀ *Basileuterus culicivorus* 8.0gms. O.-3x2mm (undevel.), sk. unoss, no fat
iris brown, bill dk. brown-black,
legs + toes olive-brown, toe pads green-brn.
stom. - insects.

1311 ♀ *Pyrrhuloxia rubra* 14.0gms. O.-5x2mm (ova ≤ 1mm, devel.), sk. ass.
iris brown, lower mandible pale blue-gray no fat
mouth flesh-pink, legs + feet obscured by fungus
Molt: body, outer primaries
stom. - fruits. Underwing linings white.

20 Feb.

1312 ♀ *Cyclarhis guianensis* 32.3gms. O.-6x3mm (ova ≤ 1mm devel.), sk. ass.
iris red, legs + feet blue gray
toe pads lt. tan, bill blue gray, stom. - insects
mouth pale flesh-gray no fat.
Molt: body, central primaries + secondaries



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Catalogue

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21 Feb.

1313 ♂ *Thraupis sayaca* 30.5 gms. T. 1mm, 4 small skull windows = 
iris brown, lower mandib. blue-gray, a
upper mandible blue-gray basally, black at rest
legs + feet blue-gray, toe pads lt. tan
Molt: body, tail, outer primaries, inner secondaries
lt. fat. stom. - fruit remains.

1314 ♂ *Vireo olivaceus* 15.3 gms. T. - 3x2mm, sk. oss. no fat.
iris brown, lower mandible whitish-blue
legs + feet gray-blue, toe pads lt. gm.
mouth pale, yell-green
stom. - insects + fruit -

Imm.
1315 ♀? *Leptotila verreauxi* 82.5 gms. O. - ? lt. fat, stom. - corn + fruits
iris brown, eyelid, bill, skin in front of eye dk. purple
legs + feet lt. pink-purple
Molt: body, remiges, rectrices

1316 ♀ *Pyriglena leucoptera* 25.0 gms. O. - 5x3mm (ova < 1mm, devel.) sk. oss.
~~netted~~
iris red, lower mandible whitish blue
legs + feet blue-gray, toe pads lt. tan.
Molt: body, outer primaries + secondaries
stom. - insects. No fat

1317 ♂ *Synallaxis* ~~netted~~
iris brown, lower mandible blue-gray, mouth flash gm.
13.5 gms. T. - 2x1mm, sk. mostly unoss, no fat, stom. - insects
legs + feet gray-green, toe pads lt. tan
Molt: body, tail, outer primaries.

22 Feb.

1318 ♀ *Lepidocolaptes fuscus* 21.8 gms. O. - 4x2mm (ova < 1mm, devel.?) sk. unoss.
~~netted~~
iris dk. brown, lower mandib. gray-white
mouth lemon-yellow, legs + feet grayish-green
toe pads bright tan. no fat. stom. - insects
Molt: body, tail

1319 ♀ *Furnarius rufus* 54.5 gms. O. - 5x3mm (ova < 1mm, devel.), sk. 1/2 oss. lt. fat
iris red-brown, lower mandible dull grayish-white
mouth lt. flesh-green, legs + feet dk. brown, toe
pads lighter brown. stom. - ants
Molt: body, tail,

1320 ♂ *Coccyzus melacoryphus* 46.2 gms. T. - 1.5mm, sk. windows, no fat.
iris brown, eyelid yell-green, bill black
legs + feet gray-blue, toe pads lt. green.
mouth white, stom. - Orthopteran remains
Molt: body, central primary + secondaries

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Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

22 Feb. (Cont.)

1321 ♂ *Elaenia*
note - bird lost some
crown (crest) feathers
(which were molting)

iris brown, lower mandible pale basally
20.8 gms. T. - 5 x 3 mm, sk. oss. (but spongy), No fat
called like Western Wood Pewee. legs + feet black
toe pads gm. mouth yell. - orange
molt: body, inner primaries, stom. fruits.

1322 ♂ *Mimus saturninus*
old wound poss. affected
weight
(see R#2 1399)

iris whitish, bill black, mouth pale green (w/ some yell.)
58.2 gms. T. - 2 x 1 mm, sk. mostly unoss. lt. fat.
legs + feet dk. brown, toe pads light - almost identical
to legs + feet of *Furnaria rufus*. stom. - Coleoptera +
molt: body. other insects

1323 ♂ *Stephanoxis labridi*

iris brown, bill + feet black, toe pads lt. gm.
3.5 gms. T. - 3 x 1.5 mm, lt. fat, molt: body
stom. - insects.

23 Feb.

1324 ♂ *Conopophaga lineata*
netted

iris dk. brown, lower mandib. pinkish-white
21.0 gms. T. - 3 x 1/2 mm, sk. oss., no fat.
legs + feet yellow-brown, toe pads tan
molt: body, tentacles
stom. - insects.

1325 ♀ *Tolmomyias sulphureus*
~~*Leptopogon amaurocephalus*~~

iris brown, lower mandib. light gray-white
16.5 gms. O. - 2 x 1 mm, sk. unoss.
legs + feet dk. gray-blue, toe pads lt. tan,
mouth flesh, no fat.
molt: body, stom. - insects (Hemiptera: Pentatomidae)
+?

1326

snake

TL = 590 mm, vent-tail 51 mm, 35 gms.
found dead on trail

24 Feb.

1327 ♂ *Troglodytes aedon*

iris brown, lower mandible pale gray basal 1/2
13.2 gms. T. - 1 mm, sk. unoss. lt. fat., stom. - insects
mouth yell. - orange, legs + feet olive-brown (pale)
toe pads tan
molt: body, tail, primaries, secondaries

1328 ♀ *Crotophaga ani*

iris dk. brown, bill black, legs + feet black
77 gms. O. - 9 x 4 mm (ova < 1 mm, devel.), no fat, stom. - insects
mouth gray-green, toe pads dk. brown
molt: outer retrices, central primaries, body

1329 ♀ *Turdus*
netted

iris red-brown, eyelid dull orange, gape yell. - orange
60.8 gms. O. - 6 x 3 mm (not devel.) sk. unoss.
mol. fat. lower mandible tinged w/ orange
stom. - fruits. legs + feet slate gray-brown, toe pads flesh-green

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Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

24 Feb. (cont.)

1330 ♀

netted

iris brn, lower mandib. light gray-green
26gms. O.-5x3mm (ova < 1mm undevol.?), 4 sm. sk. window
mouth lt. green, legs+feet gray-green, toe pads lt.
molt: body, tail, stom.-empty. No fat green
many ticks around eyes.

iris brown, rest of color as in Rm 2 1324

1331 ♂

Conopophaga lineata

netted

22gms. T.-1mm, sk. 2 oss, no fat,
stom. insects.
molt: body

25 Feb.

1332 ♂

Turdus rufiventris

iris brown, eyelid orange, mouth yell.-gm.
72gms. T.-3x2mm, sk. oss, 2 fat. molt: body
legs+feet lt. brown, toe pads lt. brown
bill olive gm. w/ yellow streaks along toms
stom.-fruit remains

1333 ♂

Pyrrhocomma ruficeps

netted

iris brown, lower mandib. blue-gray,
14.5gms. T.-1mm, sk. oss, no fat.
legs+feet gray-blue, toe pads lt. gm.
mouth slate gray-blue Molt: body, tail, outer
stom.-fruit remains

1334 ♀

Thraupis sayaca

iris brown, bill blue-gray, legs+feet dk. gray ^{blue}
34.5gms. O.-6x3mm (ova < 1mm), sk. oss, 2 fat.
toe pads lt. tan, stom. fruits
Molt: body, tail, outer primaries, central second-
aries

1335 ♂

Empidonax varius

iris dk. brown, bill black (lower mandib. fat basally)
31.5gms. T.-3x2mm, sk. oss, molt: body
legs+feet black, toe pads green
heavy abdominal fat, stom.-fruits

1336 ♂

Synallaxis

netted

iris red-brn, bill black, lower mandib. blue-gray
12.5gms. T.-1mm, sk. unoss, no fat, stom.-insects
legs+feet olive brn.
molt: body

1337 ♂

Trichothraupis melanops

netted

iris brown, lower mandib. blue-gray, legs+feet gray-blue
20.0gms. T.-1mm, sk. unoss, no fat.
stom.-insects. Molt: body, tail

26 Feb.

1338 ♂

Conopophaga lineata

netted

iris brown, lower mandib. pinkish-white, gape yellowish
21.5gms. T.-2x1mm, sk. oss, no fat. stom.-insects
mouth yell.-orange, rest of color as Rm 2 1324
molt: body, outer primaries, secondaries



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Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

26 Feb. (cont.)

1339 ♀ *Pitangus sulphuratus* nowt. 0. - 7x3mm (ova 5/1mm), ^{devel. - post-laying} st. oss. no fat
mouth yell.-orange, legs & feet black, toe pads lt. grn.
molt: outer primaries, outer retrices, body
stom. fruits

1340

snake 33gms. TL=520, vent-tail=115
from forest along rd lane

27 Feb.

1341 ♂ *Megarhynchus pitangus* 6.4gms. T. - 5x2mm, st. oss., no fat
legs & feet black, toe pads lt. grn.
stom. - 1 Homopteran

1342 ♀

"

"

color as RM 21341, stom. empty
58.5gms. O. 5x3mm (lael.), st. oss., no fat
molt: tail, body, outer primaries, inner secondaries

1343 ♂?

♂?

Zonotrichia capensis

iris brown, lower mandible dull gray
22.2gms. T. - ? st. unoss. no fat, stom. seeds
legs & feet brown, toe pads lt. brn. mouth flesh
molt: body, tail, outer primaries & secondaries

1344

♂

Sporophila caerulescens

iris dk. brown, bill greenish-yellow, tip iron
12gms. T. - 2x1mm, st. oss., no fat, stom. small seeds
legs & feet slate gray, toe pads lt. green
Molt: body.

1345 ♀

♀

Thraupis sayaca

iris brown, lower mandible tinged with blue-gray
32gms. O. - 4x3mm (undevel.), st. unoss. no fat.
legs & feet gray-blue, toe pads tan.
molt: body,

28 Feb.

1346

♂

Phylloscartes

iris dk. brown, bill black, mouth yell.-grn
7.2gms T. - 3x2mm, st. oss. (2 small post. windows), no fat
legs & feet slate gray, toe pads grn.
molt: body, outer primaries & secondaries, tail

1347

♂

Geothlypis

iris dk. brown, lower mandib. gray-white,
12.2gms. T. - 1mm, st. unoss., not fat, stom. insects
legs & feet brown, toe pads grn.
Molt: body

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29 Feb.

1348 ♂ *Colonia colonius* 15.5gms. T.-1mm, sk. unoss, lt. fat, stom. - insects
iris brown, bill, legs + feet black, toe pads green
mouth y ell. - gm.

1349 ♂ *Thamnophilus caerulescens* 19.5gms. T.-3x4mm, sk. oss. no fat, stom. - insects
iris brown, lower mandib. blue-gray
legs + feet gray-blue, tan toe pads
Molt: tail, body,

1350 ♂ *Conirostrum speciosum* 9gms. T.-1mm, sk. unoss. lt. fat, molt: body
iris brown, lower mandib. + tamium of upper blue-gray
top of upper mandib. black, mouth flesh
legs + feet gray-blue, toe pads gm.
stom. - insects

1351 ♂ *Thraupis sayaca* 31.5gms. T.-2x4mm, sk. unoss. no fat
iris brown, lower mandib. blue-gray,
lower mandib. slate gray-blue, toe pads green
mouth flesh, molt: body, tail

1352 ♀ *Tachyphonus coronatus* 27.8gms. O.-3x2mm (underl.), sk. unoss. No fat.
iris brown, lower mandib. grayish-white, upper blackish
legs + feet slate-gray, toe pads tanish-green
mouth + soft gape yell. orange, Molt: body, primaries
stom. - insects & fruits

1 March

1353 ♀ *Sicalis flaveola* 16.5gms. O.-2x1mm (underl.), sk. unoss. no fat
iris brown, lower mandib. grayish white,
legs + feet green, toe pads tan, mouth flesh - pink
Molt: body, ~~tail~~, stom. - sm. seeds

1354 ♀ *Sicalis flaveola* 15.8gms. O.-3x1½mm (underl.), sk. ~~oss.~~ ^{unoss.} no fat
colors as in RM 2 1353
Molt: body, tail. stom. - small seeds

1355 ♂ *Columbina picui* 43gms. T.-10x5mm lt. fat, molt: none
iris blue, eyelid buffy pink, bare skin around eye purplish-pink
bill black (lower mandib. pale basally)
legs + feet purple, toe pads reddish-purple
stom. seeds



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Catalogue

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay

1 March (cont.)

1356 ♀ *Trichothraupis melanocephala* 22.2 gms. O.-4x1mm (undevel.), sk. unoss. no fat
iris brown, upper mandib. black w/ blue-gray tomium
lower mandib. blue-gray, mouth ochre
legs feet gray-blue, toe pads tan, stom. - insects
molt: inner secondaries, tail, body

1357 ♂ *Philydor*

iris brown, upper mandib. brownish black; lower green-gray
21.2 gms. T.-1mm, sk. 1/2 oss. no fat, stom. - insects
mouth flesh gray w/ some yellow, legs feet olive brown
toe pads bright tan. Molt: body, tail, outer primaries
central secondaries

3 March

1358 ♂ *Leptoptila verreauxi* 17.0 gms. T.-3x1mm, lt. fat, stom. con
iris yellow, eyelid + some skin around eye red
rest of skin around eye pink, bill dk. purple
legs feet bright pinkish purple
mouth fleshy green
molt: body, inner primaries

1359 ♀ *Turdus rufiventris* 70.8 gms. O.-10x4mm (ova 1mm), sk. oss. lt. fat
color as in RMZ 1332 except more yell. in
bill + feet w/ a silvery tinge. stom. - fruit remains
molt: outer primaries, body.

1360 ♀ *Petrochelidon pyrrhonota* 19.5 gms. O.-4x2mm (qd, inactive), sk. oss. lt. fat
iris brown, bill black, mouth flesh green
legs feet dk. purple, toe pads pink
stom. - insects (Coleoptera, + ?)
molt: outer primary, body

1361 ♂ *Myiornis auricularis*

iris red-brown, bill black (white patch basally on lower mandib.)
5.2 gms. T.-1mm, large st. windows, stom. - insects, no fat
mouth yell. green, tarsae greenish purple, fat lighter (toe
pads), claws black. Molt: body

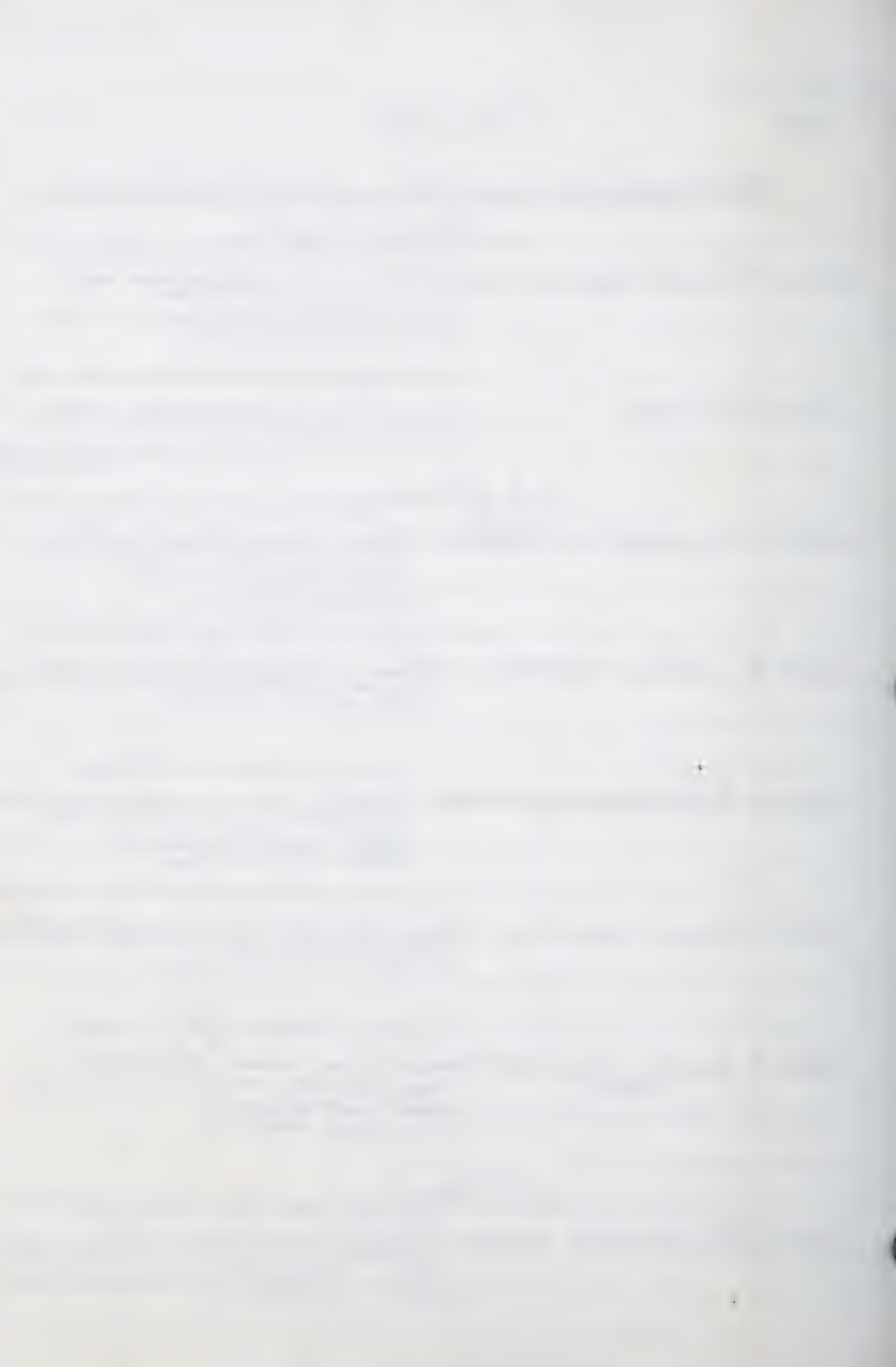
1362 ♀ *Turdus leucomelas*
needed

iris brown, bill dk. brown, ^{green,} tonia lt. green
70 gms. O.-4x2mm (undevel.), sk. ^{un}oss. lt. fat
legs + feet slate gray-green, toe pads gm.
mouth yell.-blue-green
stom. - fruits. Molt: body

4 March

1363 ♂ *Phyllascartes eximius*

iris brown, lower mandib. pale grayish white
8.2 gms. T.-1mm, sk. 1/2 oss. no fat
mouth flesh green, legs + feet gray-blue, toe pads
lt. green, Molt: body, inner secondaries
stom. - insect larva.



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Hotel El Tiro, 230m, 11.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

4 March

1364 ♀ *Elania*

iris brown, lower mandible pale gray basally
15 gms. O.-5x3mm (ova < 1mm), sk. oss, lt. fat
mouth flesh-green, legs blackish, toe pads green
Molt: body, stom.-insects

1365 ♂ *Conopophaga lineata*
netted

colors as Rm 1338 (except no fleshy gape)
24.5 gms. Ti-2x1mm, sk. oss, ~~lt. fat~~, stom.-insects
Molt: body, secondaries (central)

1366 ♂ *Philydor*

iris brown, lower mandible grayish-white
19.5 gms. Ti-1mm, sk. unoss, no fat, stom.-insects
mouth flesh, legs & feet olive brown, toe pads brown.
no molt

1367 ♂ *Synallaxis*

iris red, lower mandible slate gray-blue basally
12.5 gms. Ti-4x2mm, sk. unoss, no fat
mouth slate gray, legs & feet gray-blue, toe pads
lt. green, stom.-insects
Molt: body, outer primaries

1368 ♂ *Cacicus haemorrhous*

iris powder blue, bill: yellow basal $\frac{1}{2}$, whitish distal $\frac{1}{2}$
94 gms. Ti-3x1mm, sk. oss, no fat, stom. fruit
legs & feet black, toe pads brown, mouth bluish
Molt: body, tail, outer primaries, secondaries

5 March

1369 ♂ *Myiarchus*

iris red-brown, lower mandible dk. brown basally
22.5 gms. Ti-2x1mm, sk. oss, lt. fat, stom.-insects
legs & feet black, toe pads tan, mouth orange-yellow
Molt: body, inner secondaries

1370? young finch

iris dk. brown, tomsia & mouth yellow
7.8 gms. gonads not found, sk. unoss, no fat
lower mandible dull greenish yellow
legs & feet pinkish-green, toe pads pink
stom.-seeds & white eggshell fragments
Molt: body, wing, tail

6 March

1371 ♂ *Basileuterus culicivorus*

iris brown, lower mandible greenish-brown
9.5 gms. Ti-1mm, sk. unoss, no fat
mouth & fleshy gape yellow
legs & feet ylt. brown, toe pads bright ochre
stom.-insects



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Catalogue

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

7 March

1372 ♂ *Micrastur ruficollis* 147 gms. T.-5x2mm, lt. fat. Molt: body
iris pale brown, lower mandib. pale blue-green (black at tip)
eyelid, skin around eye, cere, - yellow-green, mouth green
front of tarsi green-yellow; rear of tarsi + toe pads yellow
stom. - Orthopteran remains

1373 ♂ *Crypturellus tataupa* 205 gms. T.-14x8mm, lt. fat, stom. fruits
iris greenish, bill pale reddish-yellow
mouth lt. green, legs + feet pale purple
Molt: body, outer primaries + secondaries, tail?

1374 ♂ *Elania parvirostris* 15.4 gms. T.-2x1mm, sk. 3 oss. mod. fat.
netted
iris dk. brown, lower mandib. pale green basally
mouth yell. orange, legs + feet black
toe pads green. stom. - empty.

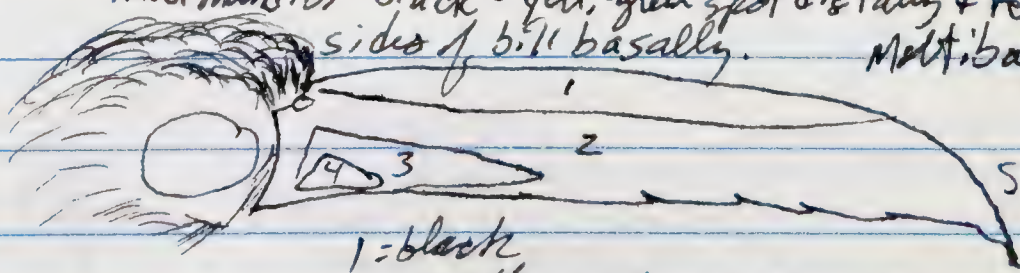
1375 ♀ *Tyrannus melancholicus* 38 gms. O.-4x2mm (undevel.), stom. - fruit
iris dk. brown, bill black, legs + feet black
mouth white (tinged pink), rest of inside of bill yellow-green
toe pads green. Lt. - mod. fat.
Molt: body

1376 ♂ *Tachyphonus coronatus* 28.7 gms. T.-1mm, sk. oss. lt. fat, stom. - fruit
iris dk. brown, lower mandible blue gray/black tip
legs + feet black, toe pads lt. tan
mouth lemon-yellow
Molt: body, tail, outer 3 primaries, inner secondaries

8 March

1377 ♂ *Machetornis rixosus* 37.5 gms. T.-9x4mm, sk. oss., no fat
iris brown, bill black, mouth yell. - green
legs + feet black, toe pads tan
stom. - Coleoptera Molt: central secondary, body

1378 ♀ *Pteroglossus castanotis* 258 gms. O.-10x6mm (undevel.), no fat
iris yellow-white, bare skin around eye black
skin on top of head above eye blue.
legs + feet olive brown, toe pads tan
mouth - dk. green; rest of inside of bill yell. orange
lower mandib. - black - yell. green spot distally + red patch on side of bill basally. Molt: body, tail, tertials
stom. - fruits



1 = black
2 = yellow to yell-green
3 = greenish w/ some yellow
4 = blackish

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Catalogue

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

8 March

1379 ♀ *Synallaxis*
~~netted~~

iris red-brown, lower mandible sl. gray-brown
10 gms. sk. ^(4/5) unoss. O. - 5x3mm (ova < 1mm, devel.)
legs brown, stom. - insects. no fat

9 March

• 1380 ♀ *Trig^hothraupis melanops*
~~netted~~

colors as in RMZ 1356
22.2 gms. O. - 4x2mm (ova < 1mm, devel.)
2 small anterior sk. windows. no fat
Molt: outer primaries, tail
stom. fruits

1381 ♀ ~~Pyrrh~~ *Pyrrhocomma ruficeps*
~~netted~~

iris brown, lower mand. whitish gray
13.5 gms O. - 5x2mm (ova < 1mm, devel.) No fat
mouth flesh, legs & feet blue-gray
toe pads tan. 2 posterior (small) sk. windows
stom. - fruits (not saved)

1382 ♀ *Drymophila*
~~netted~~

iris brown, lower mandible white-blue/gray
10.5 gms. O. - 4x2mm (undevel.), sk. $\frac{1}{2}$ oss. no fat
mouth & fleshy gape yell.-orange, stom. - insects
legs & feet greenish gray, toe pads bright green
Molt: body, tail, primaries, secondaries

10 March

1383 ♀ *Icterus cayanensis*

iris red-brown, bill black. stom. - fruits & insects
27.0 gms. O. - 4x2mm (undevel.), sk. unoss. ^{lt.} fat
legs & feet - black w/ blue-gray areas, toe pads green
Molt: body, tail, outer primaries

1384 ♂ *Trichothraupis melanocephala*

colors as RMZ 1380
22.5 gms. T. - 1mm, sk. unoss. lt. fat, stom. - fruit
Molt: body, tail.

1385 ♂ *Trogon surrucura*

iris brown, eyelid orange, bill grayish white
64.5 gms. T. - 3x2mm, no fat, stom. - insects: beetle, caterpillar
mouth flesh w/ some blue areas, legs & feet black.
toe pads lt. green. Molt: body, tail

11 March

1386 ♂ *Trogon rufus*

eyelid ~~pink~~ blue-purple, bill yellow-green
59 gms. T. - 2x1mm, no fat, stom. - orthopteran remains
mouth lt. green, iris brown
legs & feet pinkish-green, toe pads tan.
Molt: body, outer primaries



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Catalogue

Hotel El Tirol, 230 m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

11 March

1387 ♂ *Leptoptila verreauxi* 195 gms. T.-7x3mm, lt. fat
skin around eye & eyelid red-purple
iris dk. yellow, bill black
legs & feet red-purple, toe pads pinkish
Molt: body, outer primary, inner secondary
stom. - fruits ^{not outermost}

1388 ♂ *Guiraca guiraca* 145 gms. T.-10x6mm, no fat
prep. N. K. Johnson
iris yellow, skin around eye (to ear) pale yellow-green
lower mandib. dk. yellow upper brown (tarsus yell.)
1 egg. pinkish green (chick joint blue)
toe pads lt. brown. stom. - Orthoptera, large spider
other lg. insects.
Molt: complete

13 March

1389 ♀ *Parula pitiayuma* no wt. O.-3x2mm, sk. oss. lt. fat, stom. caterpillar
iris brown lower mand. yellowish-white, mouth flesh
tarsi dk. brown, feet lt. brown, toe pads bright tan

1390 ♂ *Dysithamnus mentalis* 12 gms. T.-2x1mm, sk. windows 5x3mm posterior lateral
iris brown, lower mandib. blue-gray
1 egg + feet blue gray, toe pads tan
mouth yell. - green, no fat, stom. - insects, +? fruits

1391 ♀ " " 12 gms. O.-4x2mm (oval 1mm, devel. of post-breeding)
1 egg, sk. unoss. laterally + posteriorly, stom. - insects
Molt: tail, body, outer primaries, (collect. +?)
secondaries

1392 ♂ *Furnarius rufus* 56.5 gms. T.-2x1mm, sk. 1/2 oss. lt. fat
iris red, lower mandib. lt. gray, black distal 1/3
1 egg + feet dk. brown, toe pads lighter
mouth flesh - green, stom. - insects
Molt: body, tail, central primary

14 March

1393 ♂ *Coryphospingus cucullatus* 15.8 gms. T.-1mm, sk. 1/2 oss., no fat
iris dk. brown, lower mand. gray-blue
legs & feet dk. brown, toe pads lt. brown
mouth flesh. Molt: body, outer primary, secondaries
stom. - seeds

1394 ♂ " " 14.8 gms. T.-1mm, sk. unoss. lt. fat, stom. seeds
iris dk. brown, upper lower mandible black
mouth reddish, legs & feet complex - thin
flaky layer, lt. brown, rubs off, to reveal
blackish-brown tarsi
Molt: body, inner primaries,

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Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

14 March (cont.)

colors as RM 2.1383

1395 ♀ *Icterus cayanensis* 29.8 gms. O.-4x3mm (ova < 1mm), sk. ova, lt. fat
Molt: body, tail, outer primaries

1396 ♀ *Zonotrichia capensis* 20.5 gms. O.-4x3mm (ova < 1mm), sk. ova, no fat
legs, feet + toe pads brown, stom. - scale
Molt: body, outer primaries, several secondaries

1397 ♂ *Falco sparverius* 93 gms. T.-3x2mm, no fat, stom. - insects
bill pale basally, legs + feet yell. green
mouth gray-blue, Molt: body, outer primaries
Molt: body, outer primaries

1398 ♂ *Elania* 21.8 gms. T.-1mm, lt. fat, stom. - fruit
mouth yell. - orange, legs + feet black, toe pads green
Molt: body, primaries

1399 ♂ *Mimus saturninus* 72.5 gms. T.-1mm, sk. 1/2 ova, lt. fat
mouth yell. - green, legs + feet black, toe pads brown.
Molt: body, stom. - fruit

15 March

1400 ♂ *Dacnis cayana* 15 gms. T.-2x1mm, sk. ova, no fat, stom. - fruit
mouth green, legs + feet dull reddish, toe pads pink
Molt: body, outer primaries, central secondaries

1401 ♀ *Sclerurus scansor* 36 gms. O.-3x2mm (not devel.), sk. windows anterior
mouth bluish-gray, legs + feet blackish, toe pads red-purple
stom. - insects, no fat

1402 ♀ *Trogon rufus* 55.5 gms. O.-5x3mm (ova < 1mm, devel.), no fat
top of upper mand. black, legs + feet green, toe pads tan
stom. - beetle remains + 70 mri grubs (pos. Coleoptera)
Molt: body, outer primaries.

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Catalogue

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

16 March

1403 ♂ *Tachyphonus coronatus* 22 gms. T, -1mm (black), sk. ^{tip} rose (anterior window)
netted

iris dk. brown, lower mand. b. grayish white (black)
leg & feet dk. purple, toe pads lt. green
mouth - greenish, w/ lemon yellow anterior. Rest
of inside of bill (anterior $\frac{1}{3}$) white. no fat
stom. - fruit remains

1404 ♂ *Turdus leucomelas*

iris red-brown, bill dk. green, tania yellowish
70.5 gms. T, -1mm, sk. unoss. (95%), no fat
leg & feet dk. gray-green, toe pads tan
mouth yell. green, stom. - fruit
Molt: body

1405 ♂ *Turdus leucomelas*

colors as 1404

67 gms, T, -1mm (black), sk. unoss, no fat
molt: body, tail, stom. - fruit remains

1406 ♂ *Megarhynchus pitangus*

iris dk. brown, bill, leg & feet black
62 gms. T, -3 x 1.5 mm, sk. oss, no fat
toe pads green, mouth dk. green, rest of
inside of bill pale green-gray.
Molt: body, outer primary
stom. - insects, fruits (incl. ord. lepidoptera)

17 March

1407 ♂ *Polioptila lactea*

iris dk. brown, lower mand. blue-gray basally
5.8 gms. T, -1mm, sk. oss, lt. fat, stom. - insects
leg & feet slate gray-blue, toe pads lt. green
Molt: body, tail, primary

1408 ♀ *Veniliornis spilogaster*

iris dk. brown, lower mand. pale cream-gray
37 gms. O. - 7 x 4 mm (ova < 1mm, devel.), no fat
leg & feet dk. green, toe pads tan
stom. - insect larvae. Molt: body, tail, primary

1409 ♂ *Philydor rufosuperciliatus* 22.5 gms. T, -1mm, sk. windows, no fat

iris dk. brown, lower mand. whitish
leg & feet olive-brown, toe pads tan
mouth greenish yellow, stom. - insects
Molt: body.

1410 ♂ *Philydor*

iris dk. brown, lower mandib. pale. No fat
22.5 gms. T, -1mm, sk. windows, stom. - insects
leg & feet (yell) olive brown, toe pads lighter
mouth gray-green, central $\frac{1}{3}$ of upper mand. yell.
green, distal $\frac{1}{3}$ white

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Catalogue

Hotel El Tirol, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay

17 March (Cont.)

1411 ♂ *Sittasomus griseicapillus* iris dk. brown, lower mand. pale gray-blue
12gms. T. 1mm, sk. oss., no fat
legs & feet gray-blue, toe pads tan
mouth pale flesh gray
stom. - insects Molt: body

1412 ♀ *Pachyrhamphus polychopterus* iris dk. brown, lower mand. whitish-blue
23.5gms. 0-5 x 3mm (ova < 1mm devel.)
mouth yell.-orange, legs & feet purplish-slate gray
toe pads lt. gray, sk. oss., no fat
stom. - caterpillar + green insect(?) remains
of the "little clear green balls";
molt: body.

18 March

Colors as RMZ 1396

1413 ♂ *Zonotrichia capensis* 20.5gms. T. 1mm, sk. oss., no fat, stom. - seeds
Molt: body, inner secondaries, ~~tail~~

1414 ♂ *Troglodytes aedon* iris brown, lower mand. pale cream basally
singing. no wt. T. 3 x 1mm, sk. oss., no fat, stom. - insects
mouth yell.-orange, legs & feet gray-brown, toe pads
lt. brown Molt: body, outer primaries, secondaries, tail

1415 ♂ *Crotophaga ani* iris dk. brown, bill black, legs & feet black
98gms. T. 12 x 7mm, no fat, stom. - insects
toe pads dk. brown, mouth slate gray-blue
Molt: body, tail, outer primaries

1416 ♂ *M. [unclear]* iris brown, lower mand. lt. brown basally, black
11.5gms. T. 1mm, sk. & unoss. lt. fat, stom. - insects
distally, mouth & inside of bill yell. orange
legs & feet slate gray, toe pads lt. green
Molt: body

1417 ♂ *Philydor rufosuperciliatus* colors as RMZ 1409
23.5gms. T. 1mm, sk. unoss., no fat
stom. - insects Molt: body.

1418 ♂ *Thamnophilus caeruleus* colors as RMZ 1349 (except lower mand. w/ black tip)
18.2gms. T. 3 x 1mm, sk. oss. (3), ~~no fat~~
mouth green-yellow, stom. - insects
Molt: body,
redd

all

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Catalogue

Hotel El Tiro, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

18 March (Cont.)

1419 ♂ *Synallaxis*
~~netted~~

iris red-brown, lower mand. blue-gray
12 gms. T. - 1mm, sk. unoss., no fat.
legs feet brown, toe pads tan
mouth lt. green, stom. - insects
Molt: body, outer primaries, tail

1420 ♀ *Thamnophilus caeruleus*
~~netted~~

iris brown, lower mand. pale gray w/ black tip
19.6 gms. O. - 7x3mm (ova clum, devel.) ^{2 small (3mm)} sk. unoss.
legs feet blue-gray, toe pads tan. No fat
mouth orangish, rest of inside of bill blue-gray
Stom. - insects. Molt: body, tail, outer primaries

1421 ♂ *Basileuterus culicivorus*
~~netted~~

iris brown, bill dark brown, mouth orangish
8.5 gms. T. - 1mm, sk. unoss., no fat, stom. - insects
legs feet lt. brown.

19 March

1422 ♀ *Synallaxis*
~~netted~~

iris red-brown, lower mandib. slate gray-blue
10.5 gms. O. - 5x3mm (largest ovum = 1mm, devel.)
mouth blue-gray to blackish, legs feet brown, toe pads tan
sk. mostly unoss., no fat
Molt: secondaries, tail

1423 ♀ *Philydor*

iris brown, lower mandib. pale blue-gray
19.5 gms. O. - 5x2mm (ova clum, devel.) sk. unoss.
legs feet olive brown, toe pads yellow. ~~brown~~
No fat. Molt: body, secondary, stom. - insects

1424 ♀ *Cyclarhis gujanensis*

iris red, lower mandib. grayish-white
28.5 gms. O. - 6x3mm (ova clum), no fat
tonium & distal part of upper grayish-blue
legs feet blue-gray, toe pads tan sk. oss. (2 small
mouth pinkish-green
Molt: body, secondaries, stom. - insects ^{insects})

1425 ♂ *Piaya cayana*

iris red-brown, bill yellow-green
113 gms. T. - 3x1.5mm, no fat, stom. - caterpillars.
legs feet blue, some bl. on toes, toe pads green
mouth black. Molt: wing, body, tail

1426 ♀ *Mackenziaena severa*

iris brown, bill black, mouth yell.-green
53 gms. O. - 4x3mm (undevel.) sk. unoss., no fat
legs feet blue-gray, toe pads tan
stom. - insects. Molt: body, tail, outer primaries

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Catalogue

Hotel El Tiro, 230m, 19.5 km. by road NNE Encarnación, Dpto. Itapúa, Paraguay.

20 March

- 1427 ♀ *Melanerpes candidus* 107gms. O. - 7x4mm (ova $\leq$ 1mm devel.)
iris white, skin around eye yellow,
lower mandible slate gray-blue basally, rest black
legs + feet pale olive-green (+ toe pads)
mouth pale gray-green. No fat
Molt: body, tail, outer primary, Stom. - corn
bill black, mouth bloody-gray
- 1428 ♀ *Colaptes campestris* 160gms. O. - 7x4mm (undevel.), Stom. - beetle
adult
yolk
legs + feet brown (+ toe pads?)
Molt: body, outer primary, tail

- 1429 ? *Zonotrichia capensis* 20.8gms. gonads not found, sk. oss.
colors as RMZ 1413, ~~not~~
no fat, Stom. seeds,

21 March

- 1430 ♀ *Thamnophilus caeruleus* 19gms. O. - 2x1mm (undevel.), sk. unoss, no fat
iris dk. brown, lower mandible blue-gray
mouth greenish-yellow, legs + feet blue-gray
toe pads lt. green, Stom. - insects + 7mm snail.
Molt: light body
- 1431 ♀ *Vireo olivaceus* 14.8gms. O. - 3x2mm (undevel.), sk. unoss, mod fat
iris brown, lower mandib. whitish/blue
mouth greenish w/ some yellow, legs + feet blue-gray
toe pads lt. tan, Stom. - fruit
- 1432 ♂ *Trichothraupis melanocephala* 17.8gms. T. - 2x1mm, sk. oss, no fat, Stom. - empty
iris dk. brown, lower mandib. + tomion upper blue-gray
legs + feet gray-blue, toe pads lt. green
mouth orangish. Molt: primary, secondary
retted
- 1433 ♂ *Pyrhocomma ruficeps* 12.2gms (in net overnight?), T. - 1mm, sk. windows (4x3mm)
iris dk. brown, lower mandib. blue-gray
tarsi slate gray-blue, toes more blue, toe pads gray
mouth flesh-green. No fat, Stom. - insects
retted
- 1434 ♂ *Trichothraupis melanocephala* 19gms. T. 1mm, sk. oss, no fat
colors as RMZ 1432
Stom. - insects
retted

END OF PARAGUAY COLLECTION (of RMZ).

Galileo
895

R.M.Zink

1980

Catalogue

2 mi. E, 1 mi. N Butler Pk., 2210m, San Bernardino Co., Calif.

[T. 2N, R. 1W, S. 1/4 sec. 10]

29 May

skel. only

1435

♂ *Passerella iliaca*

stom. seeds w-83 t-84 mm
36gms. T.-7x5mm, sk. oss, mod. fat

skel. only

1436

♀

"

"

stom. seeds w-81 t- none
41.5gms. O.-exam (breeding condition)
sk. oss. no fat or molt

1437

♂

"

"

no molt, stom. seeds
39gms. T.-9x5mm, sk. oss, mod. fat, full cloacal protub.

skel. only

1438

♂

Junco hyemalis

w-77mm, t-66mm

18gms. T.-7x5mm, no fat or molt

1439

♂

Passerella iliaca

sk. oss, mod. fat, no molt, stom. seeds
38gms. T.-10x5mm, full cloacal protub.

1 1/2 mi. E, 3/4 mi. N Butler Pk., 2230m, San Bernardino Co., Calif. [T. 2N, R. 1W, S. 1/4 sec. 10]

30 May

skel. only

1440

♂

Passerella iliaca

stom. seeds w-80, t-82mm

34gms. T.-8x5mm sk. oss, no fat or molt

skel. only

1441

♂

"

"

stom. seeds

37gms. T.-10x5mm, sk. oss, no fat or molt

skel. only

1442

♀

"

"

developing inc. patch, enlarged oviduct
39gms. O.-10mm ovum nearly ready to go
w-82 t-82mm, mod. fat, no molt

skel. only

1443

♂

"

"

w-84, t-84mm. no fat or molt

34gms. T.-7x5mm, sk. oss, full cloacal protub.

1444

♀

"

"

developing inc. patch, enlarged oviduct
34gms. O.-10x5mm (largest ova 2mm), sk. oss, lt. fat
no molt.

1445

♂

"

"

mod. cloacal protub.

39gms. T.-8x5mm, sk. oss, lt. fat, no molt

1446

♂

"

"

full cloacal protub.

37gms. T.-9x7mm, sk. oss, lt. fat, no molt



R.M. Zink
1980

Catalogue

1 1/2 mi. E, 3/4 mi. N Butler Plc., 2230m, San Bernardino Co.,
Calif. [T. 2N, R. 1W, SW 1/4 sec 10].

30 May (cont.)

- prob. mates of
- 1447 ♂ *Passerella iliaca* 35gms. T.-8x5mm, sk. oss, full cloacal protub.,
no fat or molt. stom. seeds, sm. insects(?) w-87 t-86
- 1448 ♀ " " 32gms. O.-9x5mm (largest ovum 2mm), sk. oss, no molt
mod. active inc. patch. lt. fat
→ don't seem post-breeding.
- 1449 ♀ " " 22gms. O.-3x2mm (undevel.), lt. fat, lt. body molt
wing+tail molt, sk. unoss.
Giving food begging calls in vicinity of 2 others (Juv's) + 3'm
sure it's an offspring of Rm 1447-48.

1/2 mi. NE Clarks Summit, 2330m, San Bernardino Co., Calif.
[T. 2N, R. 1W, NE 1/4 sec. 36].

31 May

- 1450 ♂ *Passerella iliaca* 36gms. T.-10x6mm Full cloacal protub., no molt
stom. seeds, sk. oss, lt. fat
- 1451 ♂ " " 37gms. Full cloacal protub. No molt.
stom.-seeds T.-8x5mm, lt. fat, sk. oss.
- 1452 ♂ " " 36gms. full cloacal protub. T.-10x6mm
stom.-seeds, lt. fat, sk. oss, no molt

Clarks Summit, 2350m, San Bernardino Co., Calif. [T. 2N,
R. 1W, NE 1/4 sec. 36]

- 1453 ♀ *Passerella iliaca* 37gms. O.-10x5mm (lgs. ovum 5mm), sk. oss, lt. fat
carrying nesting material. stom.-seeds + sm. Coleoptera
developing inc. patch., no molt
- 1454 ♂ " " 38gms. T.-7x5mm, sk. oss, lt. fat, no molt
stom.-seeds w-87+ t-89
- 1455 ♂ " " 35gms. T.-7x5mm, sk. oss, no fat
stom.-seeds w-87+ t-92+

R.M. Zink
1980

Catalogue

Clarks Summit, 2350m, San Bernardino Co., Calif. [T. 2N,
R. 1W, SE $\frac{1}{4}$ sec. 36]

31 May (Cont.)

1456 ♂ *Passerella iliaca* 36gms. T. - 10x5mm. sk. oss., lt. fat, no molt
full cloacal protub. stom. - seeds

1457 ♂ " " 35gms. T. - 8x5mm, sk. oss., lt. fat, no molt
full cloacal protub. stom. - seeds

1458 ♂ " " 38gms. T. - 12x7mm, sk. oss., lt. fat, no molt,
full cloacal protub. stom. - seeds

1459 ♂ " " 38gms. T. - 7x5mm. sk. oss., lt. fat, no molt
stom. - seeds w - 88 t - 91
skel. only

1 June

skeleton only - used for karyotype

1460 ♂ " " no wt. T. - 9x6mm, sk. oss., not fat

1461 ♂ " " no wt. T. - 11x6mm, sk. oss., not fat, no molt
w + t worn

1462 ♂ " " 29gms. (captive) T. - 10x5mm. sk. oss., lt. fat
w - worn t - worn

1463 ♂ " " no wt. T. - 10x5mm, sk. oss., not fat, no molt
w + t worn

1464 ♂ *Nucifraga columbiana* No wt., T. - 4x2mm, lt. fat
molt: body, wings, tail
skel. only

1 $\frac{1}{2}$ mi. N, $\frac{1}{4}$ mi. W Black Butte, 2010m, Glenn Co., California
[T. 22N, R. 9W, NW $\frac{1}{4}$ sec. 21]

22 June

skeleton only

coll. D.A. Good, w - 85mm, t - 85mm

1465 ♂ *Passerella iliaca* 34gms.

skeleton only

w - 87mm, t - 90mm

1466 ♂ " "

39gms.

R.M. Zink

1980

Catalogue

1/4 mi. N Black Butte, 2080m, Glenn Co., Calif. [T. 22N, R. 9W, NW 1/4 sec. 27].

22 June

coll. D.A. Good

Full cloacal protub.

1467 ♂ *Passerella iliaca* 34gms. T. - 10x5mm, sk. oss., no fat, no molt

skeleton only

stom. - sm. insects (coleoptera, +?), grit, sm. seeds

1468 ♀ " " 38gms. O. - 10x5mm (largest ovum - 2mm), active inc. patch, sk. oss. lt. fat. no molt. w - 81mm t - 83mm

skeleton only

stom. - grit, + sm. seeds. w - 84mm t - 85mm

1469 ♂ " " 39gms. T. - 10x6mm, sk. oss., lt. fat, no molt
Full cloacal protub.

1/4 mi. E Anthony Pk., 1950m, Mendocino Co., Calif.

[T. 23N, R. 10W, SW 1/4 sec. 15].

1470 ♂ " " 38gms. T. - 10x5mm, sk. oss., no fat, no molt
Full cloacal protub.

1471 ♀ " " 39gms. O. - 10x5mm (2mm), active inc. patch, lt. fat, no molt

skeleton only

stom. - insects, Full cloacal protub. w - 85mm t - 83mm

1472 ♂ " " 36gms. T. - 9x5mm, sk. oss., lt. fat, no molt

skeleton only

stom. - insects, Full cloacal protub. w - 84mm t - 85mm

1473 ♂ " " 37gms. T. - 10x5mm, sk. oss., no fat, lt. fat

skeleton only

Full cloacal protub. w - 86mm t - 90mm

1474 ♂ " " 42gms. T. - 12x7mm, sk. oss., no molt, lt. fat

skeleton only

active inc. patch, no molt, w - 81mm t - 80mm

1475 ♀ " " 39gms. O. - 10x5mm (1st. ova 2mm), sk. oss., not fat

skeleton only

Full cloacal protub. w - 82mm t - 84mm

1476 ♂ " " 38gms. T. - 10x5mm, sk. oss., not fat, no molt,

1/2 mi. N, 1/4 mi. W Black Butte, 2010m, Glenn Co., Calif. [T. 22N,

R. 9W, NW 1/4 sec. 21].

21 June

1478 ♂ *Peromyscus* 170-73-21-17 = 22gms. T. - 12x7mm (abdominal), not fat

R.M. Zink
1980

Catalogue

1/4 mi. E Anthony Pk. 1950m, Mendocino Co, California [T. 23N,
R. 10W, SW 1/4 sec. 15].

23 June

skeleton only

coll. D.A. Good

mod. active inc. patch. no molt

1479 ♀ *Passerella iliaca* 31gms. O. - 7x6mm (1st. ovum 1mm), sk. oss., lt. fat

coll. D.A. Good

sk. oss. lt. fat no molt, w - 80mm. t - 83mm.

1480 ♂ 33gms. T. - 9x6mm, Full cloacal protub.

Full cloacal protub.

1481 ♂ 36gms. T. - 8x5mm, sk. oss., lt. fat, no molt

Full cloacal protub.

1482 ♂ 42gms. T. - 10x5mm, sk. oss., lt. fat, no molt

Full cloacal protub.

1483 ♂ 35gms. T. - 8x3mm, sk. oss., lt. fat, no molt

coll. D.A. Good

Full cloacal protub.

1484 ♂ 38gms. T. - 10x5mm, sk. oss., lt. fat, no molt

Full cloacal protub.

1485 ♂ 34gms. T. - 8x5mm, sk. oss., lt. fat, no molt

8 mi. N, 6 mi. W N Yolla Bolly Mtn, 1480m, Trinity Co, Calif.
[T. 25, R. 11W, NW 1/4 sec. 3]

24 June

skeleton only

coll. S. Kaiser

wing + tail worn, Full cloacal protub.

1486 ♂ 38gms. T. - 8x6mm, sk. oss., lt. fat, no molt

coll. S. Kaiser

partially albinistic

1487 ♂ 39gms.

25 June

skeleton only

Full cloacal protub. w - 87mm, t - 90mm

1488 ♂ 34gms. T. - 9x5mm, sk. oss., lt. fat, no molt

skeleton only

Full cloacal protub. w - 88mm, t - 88mm

1489 ♂ 37gms. T. - 8x5mm, sk. oss., lt. fat, no molt
tail asymmetric (left side 8mm longer)

R.M. Zink

1980

Catalogue

8 mi. N, 6 mi. W N Yolla Bolly Mtn. 1480m, Trinity Co. Calif.
[T. 2S, R. 11W, NW 1/4 sec. 3]

25 June (con't.)

skeleton only

1490

♂

Passerella iliaca

34gms.

Full cloacal protub. wing+tail worn

T. - 8x5mm, sk. oss., lt. fat, no molt

skeleton only

1491

♂

"

Full cloacal protub. w-81mm, t-84mm

" 35gms. T. - 9x7mm, sk. oss., lt. fat, no molt

skeleton only

1492

♂

"

Full cloacal protub. wing+tail worn

" 37gms. T. - 9x6mm, sk. oss., lt. fat, no molt
tail asymmetric (left 8mm longer)

alcoholic

Imm.

1493

♀

"

" 29gms. O. - 3x1mm

skeleton only

1494

♀

"

feeding RMZ 1493 on ground. Old inc. patch w-79mm

" 34gms. O. - 10x5mm (ova 2mm), sk. oss., lt. fat,
t-81mm no molt

skeleton only

1495

♀

"

w-78mm, t-80mm, inc. patch moderate. no molt

" 34gms. O. - 8x5mm (ova 1mm), sk. oss., lt. fat

skeleton only

1496

♀

"

w-78mm, t-79mm, Brood patch present no molt

" 31gms. O. - 8x5mm (ova 1mm), sk. oss., lt. fat

skeleton only coll. D.A. Good

1497

♂

"

w-85mm, t-83mm, Full cloacal protub.

" 33gms. T. - 10x5mm, sk. oss., lt. fat

skeleton only coll. D.A. Good

1498

♀

"

mod. active inc. patch, wing-80mm, t-83mm

" 41gms. O. - 10x6mm (ova 1 1/2mm)

1499

♂

Vermivora ruficapilla

9gms.

stom. - insects. mod. cloacal protub.

T. - 4x3mm, sk. oss., lt. fat, no molt

1500

♂

Passerella iliaca

38gms.

Full cloacal protub.

T. - 9x5mm, sk. oss., lt. fat, no molt

skeleton only

1501

♂

"

"

w-86mm, t-90mm, Full cloacal protub.

36gms. T. - 11x6mm, sk. oss., lt. fat, no molt

R. M. Zink

1980

Catalogue

8 mi. N, 6 mi. W N Yolla Bolly Mtn, 1480m, Trinity Co., Calif. [T. 25, R. 11 W, NW 1/4 sec. 3]

25 June

skeleton only

w-85⁺mm, t-88⁺mm, Full cloacal protub.

1502 ♂ *Passerella iliaca* 35gms. T.-8x5mm sk.oss, lt.fat, no molt

Full cloacal protub.

1503 ♂ " " 34gms. T.-8x5mm, sk.oss, lt.fat, no molt

Full cloacal protub.

1504 ♂ coll. S. Kaiser " 38gms. T.-9x6mm, sk.oss, lt.fat, no molt

skeleton only

coll. S. Kaiser

1505 ♀ " " 32gms. O.-5x2mm, lgst. ovum 1mm.

skeleton only

wing+tail worn. Full cloacal protub.

1506 ♂ " " no wt. T.-8x5mm. sk.oss, lt.fat, no molt

skeleton only

wing+tail worn. Full cloacal protub.

1507 ♂ " " no wt. T.-10x7mm. sk.oss, lt.fat, no molt

skeleton only

wing+tail worn. Full cloacal protub.

1508 ♂ " " no wt. T.-10x9mm sk.oss, lt.fat, no molt

26 June

Full cloacal protub.

1509 ♂ " " no wt. T.-8x5mm, sk.oss, not fat, no molt

1 1/2 mi. N, 3 mi. E Eaton Pk, 1650m, Siskiyou Co, Calif.
[T. 40 N, R. 10 W, SW 1/4 sec. 14]

28 June

w-78⁺mm, t-79⁺mm

skeleton only

1510 ♀ " " 40gms. O.-12x6mm (lgst. ovum 3mm) sk.oss no molt, mod. active inc. patch. lt.fat

Active inc. patch.

1511 ♀ " " 31gms. T.-7x4mm (ova ≤ 2mm), sk.oss, lt.fat, no molt

Active inc. patch. No molt.

1512 ♀ " " 29gms. O.-8x5mm (ova ≤ 2mm), sk.oss, lt.fat

Full cloacal protub.

1513 ♂ " " 35gms. T.-7x5mm, sk.oss, lt.fat, no molt



R.M. Zink
1980

Catalogue

1½ mi. N, 3 mi. E Eaton Pk, 1650m, Siskiyou Co, Calif.
[T. 40N, R. 10W, SW¼ sec. 14].

28 June (Cont.)

- notes {
1514 ♀ coll. S. Kaiser w- 75⁺ t- 77mm
Passerella iliaca 34gms. O.- 10x5mm (1 lgt. ovum = 3mm), sk. oss., lt. fat, no molt, mod. active inc. patch
1515 ♂ coll. S. Kaiser mod. cloacal protub. w+t- 84⁺mm
" " 31gms. T.- 10x7mm, sk. oss., lt. fat, no molt

- 1516 ♂ coll. S. Kaiser Full cloacal protub.
" " 37gms. T.- 10x7mm, sk. oss., lt. fat, no molt

1½ mi. N, 2½ mi. W Eaton Pk, 1830m, Siskiyou Co, Calif. [T. 40N, R. 10W, SE¼ sec. 14].

- notes {
1517 ♀ coll. D.A. Good Active inc. patch
" " 36gms. O.- 10x5mm (1 lgt. ova = 2mm), sk. oss., lt. fat, no molt
1518 ♂ coll. D.A. Good Full cloacal protub.
" " 37gms. T.- 10x6mm, sk. oss., lt. fat, no molt

- skeleton only 1519 ♂ " Full cloacal protub. w- 81⁺mm t- 82⁺mm
" " 34gms. T.- 10x5mm, sk. oss., lt. fat, no molt

- 1520 ♂ " Full cloacal protub.
" " 37gms. T.- 9x5mm, sk. oss., lt. fat, no molt

29 June

- 1521 ♀ coll. D.A. Good sk. oss., lt. fat, no molt, mod. devel. inc. patch
Passerella iliaca 33gms. O.- 10x8mm, lgt. ovum- 6mm., w+t- 79⁺

- 1522 ♀ coll. D.A. Good sk. oss., lt. fat, mod. active inc. patch, no molt
" " 35gms. O.- 7x5mm, lgt. ovum- 2mm., w- 78⁺mm, t- 80⁺mm

- 1523 ♂ coll. D.A. Good mod. cloacal protub.
" " 36gms. T.- 9x5mm, sk. oss., lt. fat, no molt w- 85⁺mm, t- 89⁺mm

- 1524 ♀ " w+t- 78⁺mm
" 39gms. O.- 10x5mm (1 lgt. ovum 3½mm), sk. oss., lt. fat, Active inc. patch.

- 1525 ♂ " Full cloacal protub.
" 33gms. T.- 8x5mm, sk. oss., lt. fat, no molt

R.M. Zink
1980

Catalogue

1 1/2 mi. N, 2 1/2 mi. W Eaton Pk, 1830m, Siskiyou Co., Calif. [T. 40N, R. 10W, SE 1/4 sec. 14].

29 June (cont.)

1526 ♂ *Passerella iliaca* 33gms. Full cloacal protub. T. - 10x5mm, sk. ood, Lt. fat, no molt

1 mi. S, 3 mi. W Pyramid Pk, 1580m, Siskiyou Co., California

[T. 18N, R. 6W, NW 1/4 sec. 10].

30 June

1527 ♂ *Passerella iliaca*, 32gms., T. - 8x6mm; cloacal protub., no molt, not fat

skel. only 1528 ♀ coll. D.A. Good, 32gms, broad patch. w - 79mm, t - 78mm, O. - 5x3mm, 1st ovum - 1 1/2mm, sk. ood, Lt. fat, no molt

skel. only 1529 ♂ coll. D.A. Good, 34gms, T. - 10x7mm, cloacal protub. w - 83mm, t - 85mm, sk. ood, Lt. fat, no molt

skel. only 1530 ♂ coll. D.A. Good, 32gms, Full cloacal protub. w - 83mm, t - 80mm, T. - 10x7mm, no molt, sk. ood, Lt. fat

skel. only 1531 ♂ coll. D.A. Good, 33gms, w - 83mm, t - worn, T. - 7x5mm, sk. ood, no molt, Lt. fat, mod. cloacal protub.

1532 ♀ " " 40gms. Active inc. patch. O. - 6mm (1st. ovum 10mm), sk. ood, Lt. fat, no molt

1533 ♂ " " 34gms, Full cloacal protub. T. - 10x5mm, sk. ood, Lt. fat, no molt

1534 ♂ " " 34gms, Full cloacal protub. T. - 10x5mm, sk. ood, Lt. fat, no molt

skel. only 1535 ♂ " " 32gms, Full cloacal protub. w - 83mm, t - 84mm, T. - 8x5mm, sk. ood, Lt. fat, no molt

1536 ♂ coll. S. Kaiser, 33gms, Full cloacal protub. not fat, no molt, T. - 11x6mm, sk. ood

R.M. Zink
1980

Catalogue

3 1/2 mi. W Pyramid Pk. 1660m, Siskiyou Co., Calif. [T. 18N,
R. 6W, NE 1/4 sec. 4].

1 July

coll. D.A. Good

Full cloacal protub.

1537



Passerella iliaca

34gms

T. 10x5mm, sk. oss., lt. fat, no molt

skeleton only
1538 ♀

"

"

Lt. fat, mod. active brood patch
35gms. O. - 6x5mm (1 get. ova $\leq$ 2mm), sk. oss.
w - 79mm, t - 78mm

skeleton only
1539 ♂

"

"

~~Full~~ Mod. cloacal protub. w - 81mm t - 85mm
32gms. T. - 10x5mm, sk. oss., lt. fat, no molt

prob.
mates

1540



"

"

Full cloacal protub. carrying insects in bill.
30gms. T. - 10x5mm, sk. oss., lt. fat, no molt

1541



"

"

Active brood patch
33gms. O. - 7x4mm (1 get. ovum 2mm), sk. oss., lt. fat

skeleton only
1542 ♂

"

"

Full cloacal protub.
33gms. T. - 8x5mm, sk. oss., lt. fat, no molt

1543



Empidonax wrightii

13.5gms. T. - 7x3mm, sk. oss., no fat
16 cloacal protub.

9 mi. N, 5 mi. E Mt. Shasta, 1800m, Siskiyou Co., Calif.
[T. 43N, R. 2W, SE 1/4 sec. 20].

2 July

mod. cloacal protub.

dr. mates & parents

1548+

1549

1544



Passerella iliaca

34gms

T. - 10x5mm, sk. oss., no fat, no molt

skeleton only
1545 ♀

"

"

Brood patch. w + t - worn
29gms. O. - exam (breeding), sk. oss., no molt, lt. fat

skeleton only
1546 ♀

"

"

no molt. Brood patch w - 80mm t - 83mm
32gms. O. - 6x3mm (1 get. ova $\leq$ 1mm), sk. oss., lt. fat

R.M. Zink
1980

Catalogue

9 mi. N, 5 mi. E Mt. Shasta, 1800m, Siskiyou Co., Calif. [T. 43N
R. 2W, SE $\frac{1}{4}$ sec. 20].

3 July

1547 ♂ *Passerella iliaca* 29gms. ^{mod. cloacal protub.} T. 6x4mm, ^{not} sk. oss, ^{fat} fat, no molt

nestling, alcoholic

1548 ♀

no wt. O. - 2x1mm

irides dk. red-brown, gape (flange) - pale yellow

mouth - purple-pink, inside of bill pale yellow
bill slate steel-blue, toe pads pale yellow (sk. out)
legs + toes - pinkish purple (toes darker - not purple)

nestling, alcoholic

1549 ♂

no wt. T. - 1mm

colors as 1548, except toes
not darker than tarsi.

8 $\frac{1}{2}$ mi. N, 2 mi. E Mt. Shasta, 2050m, Siskiyou Co.,
Calif. [T. 43N, R. 3W, SW $\frac{1}{4}$ sec. 26]

skeleton only

1550 ♀

"

W - 79mm, t - 80mm
" 32gms. O. 10x5mm (ova ≤ 2 mm) sk. oss, no molt
Lt. fat. Broad Patch

skeleton only

1551 ♀

"

Broad patch w+t-wom
" no wt. O. - 8x6mm (1st ova $\leq 2\frac{1}{2}$ mm), sk. oss
no molt, not fat

skeleton only

1552 ♀

"

mod. active inc. Patch.
" no wt. O. - 8x5mm (ova ≤ 2 mm), sk. oss, ^{lt.} fat
no molt

skeleton only

1553 ♂

"

Full cloacal protub. W - 82mm, t - 86mm
" no wt. T. 8x5mm, sk. oss, no molt, not fat

1554 ♀

active. inc. Patch.

no wt. O. - 8x4mm (1st ova 3mm), sk. oss, no fat

skeleton only

1555 ♂

coll. D.A. Good

4 July

Full cloacal protub. W - 79mm t - 75mm
30gms, T. 6x4mm, sk. oss, no molt, ^{no} fat

skeleton only

1556 ♂

coll. D.A. Good

mod. cloacal protub. w+t-wom
35gms. T. - 7x4mm, sk. oss, not fat, no molt

skeleton only

1557 ♂

coll. D.A. Good

mod. cloacal protub. W - 80mm, t - 83mm
30gms. T. - 11x7mm, sk. oss, no molt, not fat

Ull

26

Ull

ull

uh

R.M. Zink
1980

Catalogue

8 $\frac{1}{2}$ mi. N, 2 mi. E Mt. Shasta, 2050m, Siskiyou Co., Calif. [T. 43N,
R. 3W, SW $\frac{1}{4}$ sec. 26].

4 July

coll. D. A. Good

lt. fat. mod. cloacal protub.

1558 ♂ *Passerella iliaca* 32gms. T.-8x5mm, sk. ova., no molt

skeleton only coll. D. A. Good

lt. fat, Brood patch. no molt w+t-worn

1559 ♀ " " 34gms. O.-exam. (egg in oviduct), sk. ova.

coll. S. Kaiser

mod. cloacal protub.

1560 ♂ " " 31gms. T.-6x4mm, sk. ova., no molt, not fat

mod. cloacal protub.

1561 ♂ " " 31gms. T.-9x5mm, sk. ova., not fat, no molt

mod. cloacal protub.

1562 ♂ " " 32gms. T.-7x4mm, sk. ova., not fat, no molt

skeleton only

w+t-worn. mod. active brood patch

1563 ♀ " " 28gms. O.-7x4mm (ova ≤ 1mm), sk. ova., lt. fat

skeleton only

mod. cloacal protub. w-82mm t-84mm

1564 ♂ " " 30gms. T.-8x5mm, sk. ova., no molt, not fat

mod. cloacal protub.

1565 ♂ " " 31gms. T.-9x5mm, sk. ova., not fat, no molt

mod. cloacal protub.

1566 ♂ " " 32gms. T.-9x5mm, sk. ova., no molt, not fat

skeleton only

mod. cloacal protub. w-81mm t-85mm

1567 ♂ " " 29gms. T.-exam, sk. ova., not fat, no molt

skeleton only

mod. cloacal protub. w-83mm t-86mm

1568 ♂ " " 32gms. T.-10x6mm, sk. ova., no molt, not fat

skeleton only

mod. cloacal protub. w+t-worn

1569 ♂ " " 29gms. T.-9x5mm, sk. ova., no molt, not fat

no molt, mod. active inc. patch.

1570 ♀ " " 30gms. O.-8x4mm (1st. ova ≤ 2mm), sk. ova., not fat

Handwritten signature or scribble.

Handwritten signature or scribble.

R.M. Zink
1980

Catalogue

8 $\frac{1}{2}$ mi. N, 2 mi. E Mt. Shasta, 2050m, Siskiyou Co., Calif.

[T. 43N, R. 3W, SW $\frac{1}{4}$ sec. 26].

1571 ^{skeleton only} ♀ *Passerella iliaca* 30 gms. ^{4 July (Cont.) / Lt. fat. Brood patch} O. - 10x5mm (ova $\leq$ 2mm), sk. oss, no molt

1572 ^{skeleton only} ♀ " " mod. active brood patch 35 gms. O. - 8x5mm (ova $\leq$ 2 $\frac{1}{2}$ mm), sk. oss, no molt, not fat

1573 ♂ " " mod. cloacal protub. 30 gms. T. - 8x6mm, sk. oss, ~~not~~ not fat, no molt

Spencer Creek, 1230m, 2mi. N, 3mi. E Buck Mtn.,

Klamath Co., Oregon [T. 39S, R. 6E, SW $\frac{1}{4}$ sec. 2].

6 July

1574 ^{skeleton only} ♂ *Passerella iliaca* 30 gms. ^{lt. cloacal protub. w-82mm t-88mm!!} T. - 7x5mm, sk. oss, no fat or molt

1575 ♀ " " Brood patch. 29 gms. O. - 7x4mm, sk. oss, not fat, no molt

1576 ♂ " " mod. cloacal protub. 30 gms. T. - 9x5mm, sk. oss, not fat, no molt

1577 ^{skeleton only} ♂ " " mod. cloacal protub. w-80mm, t-83mm 32 gms. T. - ~~exam~~ (breeding cond.), sk. oss, not fat

1578 ♂ " " mod. cloacal protub. 35 gms. T. - 9x5mm, sk. oss, not fat, no molt

1579 ^{skeleton only} ♂ " " mod. cloacal protub. w-81mm t-82mm 33 gms. T. - 7x5mm, sk. oss, no molt, ~~not~~ fat

1580 ^{skeleton only} ♀ " " Brood patch w-78mm t-81mm 31 gms. O. - 7x5mm (1 ova 3mm), sk. oss, no molt, lt. fat

1581 ^{skeleton only} ♂ " " 7 July mod. cloacal protub. w-82mm t-84mm 32 gms. T. - 7x5mm, sk. oss, not fat or molt

R.M. Zink
1980

Catalogue

Spencer Creek, 1230m, 2mi. N, 3mi. E Buck Mtn., Klamath
Co., Oregon [T. 39S, R. 6E, SW $\frac{1}{4}$ sec. 2].

7 July

skeleton only

1582 ♂ *Passerella iliaca* mod. cloacal protub. w-80⁺ t-missing
30gms. T. - exam, sk. oss., no fat or molt

1583 ♂ " " mod. cloacal protub.
32gms. T. - 9x5mm, sk. oss., no fat, no molt

1584 ♂ " " mod. cloacal protub.
31gms. T. - 6x4mm, sk. oss., lt. fat, no molt

skeleton only

1585 ♂ " " mod. cloacal protub. w-78⁺ t-80⁺
29 $\frac{1}{2}$ gms. T. - 7x5mm, sk. oss., lt. fat, no molt

1586 ♀ " " Brood patch.
31gms. O. - 6x4mm (ova 5 1/2mm), sk. oss., no fat

skel. only Imm.

1587 ♂ " " w-79⁺ t-80⁺, lt. fat.
33gms. T. - 1mm, sk. unoss., molt: body, tail

Imm.

1588 ♀ " " 29gms. O. - 2x1mm, sk. unoss., lt. fat, lt. body molt

skeleton only

1589 ♀ *Melospiza melodia* old brood patch w-65mm
23gms. O. - 7x4mm (1 yolk, ovum 1/2mm), sk. oss.

skeleton only Imm.

1590 ♂ " " 21gms. T. - 1mm

11mi. S, 2mi. W Mt. McLaughlin, 1430m, Jackson Co., Oregon
[T. 38S, R. 4E, SW $\frac{1}{4}$ sec. 4].

9 July

coll. D.A. Good

1591 ♂ " " mod. cloacal protub.
31gms. T. - 9x6mm, sk. oss., no fat, no molt

1592 ♂ " " mod. cloacal protub.
30gms. T. - 7x4mm, sk. oss., no fat, no molt

1593 ♀ " " no molt. Brood patch.
33gms. O. - 6x4mm (1 yolk, ovum 2mm), sk. oss., lt. fat

R. M. Zink
1980

Catalogue

[T. 385, R. 4E, SW¹/₄ sec. 4].

11 mi. S, 2 mi. W Mt. McLaughlin, 1430m, Jackson Co., Oregon

9 July (cont.)

skeleton only

1594 ♂ *Passerella iliaca* 32gms. T. - 7x5mm, sk. oss., lt. fat, no molt
lt. cloacal protub. w - 80⁺mm t - 83⁺mm

skeleton only

1595 ♀ " " 29gms. O. - 7¹/₂ x 4mm (1 gsd. ovum 1¹/₂mm), sk. oss.
Brood patch, no molt, no fat w - 75⁺mm t - 77⁺mm

skeleton only

1596 ♂ " " 32gms. T. - 7x5mm, sk. oss., no molt, no fat
mod. cloacal protub. w - 82⁺mm t - 86⁺mm

skeleton only

1597 ♀ " " 32gms. O. - 6x4mm (ova $\leq$ 1¹/₂mm), sk. oss., no molt
lt. fat, Brood patch, w - 79⁺mm t - 81⁺mm

2 mi. S, 2 mi. W Mt. McLaughlin, 1500m, Jackson Co., Oregon

[T. 365, R. 4E, NE¹/₄ sec. 28].

10 July

1598 ♂ *Passerella iliaca* 32gms. T. - exam, sk. oss., not fat, no molt
mod. cloacal protub.

1599 ♀

" " 27gms. O. - exam (ova $\leq$ 1mm), sk. oss., not fat, no molt
brood patch

1600 ♂

" " 31gms. T. - 1¹/₂ x 1mm, sk. oss., no fat, no molt
lt. cloacal protub.

1601 ♂

" " 33gms. T. - 9x5mm, sk. oss., not fat, no molt
Mod. cloacal protub.

1602 ♂

" " 30gms. T. - 6x4mm, sk. oss., no molt, no fat
mod. cloacal protub.

skeleton only

1603 ♂ " " 35gms. T. - 6x4mm, sk. oss., no molt, no fat
mod. cloacal protub. w - 79⁺mm t - 82⁺mm

skeleton only

1604 ♂ " " 31gms. T. - 7x5mm, sk. oss., no molt, no fat
mod. cloacal protub. w - 82⁺mm t - 85⁺mm

skeleton only

1605 ♂ " " 32gms. T. - 7x5mm, sk. oss., no molt, lt. fat
mod. cloacal protub. w - worn t - 86⁺mm

R.M. Zink

1980

Catalogue

2mi. S 2mi. W Mt. McLaughlin, 1500m, Jackson Co, Ore. [T. 36S, R. 4E, NE $\frac{1}{4}$ sec. 28]

10 July

anatomical Imm. coll. D.A. Good 26gms.
1606 ♂ *Passerella iliaca* T.-1mm

skeleton only " " w-79mm t-82mm
1607 ♀ 38gms. O.-exam (yolked egg in oviduct), sk. oss.
no molt, lt. fat, Brood patch

skeleton only " " Lt. cloacal protub. w-82mm t-85mm
1608 ♂ 32gms. T.-8x6mm, sk. oss., no molt, lt. fat

1mi. S $\frac{1}{4}$ mi. E Odell Butte, 1580m, Klamath Co, Oregon
[T. 24S, R. 7E, SW $\frac{1}{4}$ sec. 26]

11 July

anatomical ♀ Williamson Sapsucker
1609 ♀ ~~*Passerella iliaca*~~ 50gms.

skeleton only coll. D.A. Good mod. cloacal protub. w-82mm t-86mm
1610 ♂ *Passerella iliaca* 30gms. T.-7x5mm, sk. oss., no molt, no fat

skeleton only coll. D.A. Good w-77mm t-78mm
1611 ♀ 29gms. O.-6x3mm (1 got. ovum 2mm), sk. oss., no molt
lt. fat, Brood patch

coll. D.A. Good Lt. cloacal protub.
1612 ♂ 30gms. T.-6x4mm, sk. oss., no fat, molt: 2nd primaries

~~1613~~ skeleton only coll. D.A. Good w-60mm t-60mm
1613 ♀ 28gms. O.-8x4mm (1 got. ovum 2mm), sk. oss., no molt, lt. fat
Brood patch

coll. D.A. Good mod. cloacal protub.
1614 ♂ 31gms. T.-6x4mm, sk. oss., no molt, lt. fat

coll. S. Kaiser lt. fat, Brood patch.
1615 ♀ 28gms. O.-5x3mm (1 got. ova $\leq 1\frac{1}{2}$ mm), sk. oss., no molt

skeleton only coll. S. Kaiser mod. cloacal protub. w-82mm t-84mm
1616 ♂ 29gms. T.-8x6mm, sk. oss., no molt, lt. fat

skeleton only coll. S. Kaiser mod. cloacal protub. w-80mm t-80mm
1617 ♂ 29gms. T.-10x6mm, sk. oss., no molt, no fat

R.M. Zink
1980

Catalogue

1 mi. S, 1/4 mi. E Odell Butte, 1580m, Klamath Co., Oregon [T. 24S, R. 7E, SW 1/4 sec. 26]

11 July

skeleton only coll. S. Kaiser

7966 1618 ♂ *Passerella iliaca* 28gms. mod. cloacal protub. w - vom t - 80⁺mm
T. - 6 x 4mm, sk. oss., no fat, no molt

7967 1619 ♂ " " 29gms. Lt. cloacal protub.
T. - 4 x 2mm, sk. oss., no fat,
molt: back, inner primaries

7968 1620 ♂ " " 30gms. mod. cloacal protub.
T. - 7 x 5mm, sk. oss., no molt, no fat

7969 1621 ♀ " " 28gms. no molt. Brood patch.
O. - 5 x 3mm (ova < 1mm), sk. oss., lt. fat

7970 1622 ♂ " " 29gms. skeleton only mod. cloacal protub. w - 78⁺mm t - 83⁺mm
T. - 7 x 5mm, sk. oss., no molt, no fat

1623 ♂ " " 32gms. mod. cloacal protub.
T. - 7 x 5mm, sk. oss., no fat, no molt

7972 1624 ♂ " " 29gms. skeleton only mod. cloacal protub. w - 80⁺mm t - 85⁺mm
T. - 7 x 5mm, sk. oss., no molt, lt. fat

7973 1625 ♂ " " 30gms. mod. do
T. - 7 x 5mm, sk. oss., no molt, no fat

Whorehouse Meadow, 2230m, 1/2 mi. N, 1 mi. E Lost Lake, Harney Co.,
Oregon [T. 32N, R. 33E]

12 July

anatomical

52 1626 ^{sex?} *Melospiza lincolnii* 21gms. gonads not found.

13 July

1627 ♂ *Passerella iliaca* 29gms. Lt. cloacal protub.
T. - exam, sk. oss., no fat, no molt

1628 ♀ " " 28gms. w + t vom. Brood patch
O. - 4 x 2mm (ova < 1mm), sk. oss., no fat
molt: inner primaries, body

R.M. Zink

1980

Catalogue

[T. 32N, R. 33E].

Whorehouse Mdw., 2230m, 1/2 mi. N, 1 mi. E Lost Lake, Harney Co., Oregon

13 July

skeleton only

1629 ♂ *Passerella iliaca* Lt. cloacal protub. w - 82^{mm} t - 84^{mm}
29gms. T. - 4x2mm, sk. oss., lt. fat, no molt

skeleton only

1630 ♂ " " w - 80^{mm}, t - 80^{mm} Lt. cloacal protub.
29gms. T. - exam, sk. oss., no molt, lt. fat

Steens Mtn. 2260m, 1 mi. E Lost Lake, Harney Co., Oregon [T. 32N, R. 33E].

skeleton only

1631 ♀ " " 30gms. O. - 5x4mm (1 yst. ovum 1^{mm}), sk. oss. no molt
Brood patch, w - 79^{mm}, t - 75^{mm}, Lt. fat

skeleton only

1632 ♂ " " 29gms. T. - ? [by lack of brood patch] - gonads appeared to
be clear, somewhat hard spheres (spermatized)
sk. oss., no tail (molt), sk. oss., w - 82^{mm} No cloacal protub.

mod. cloacal protub.

1633 ♂ " " 29gms. T. - 6x4mm, sk. oss., no fat, no molt

Banded: 851 66453 mod. cloacal protub.

1634 ♂ " " 30gms. T. - 6x4mm, sk. oss., no fat, no molt

mod. cloacal protub.

1635 ♂ " " 30gms. T. - 7x5mm, sk. oss., no fat, no molt

63

1636 ♂ " " 30gms. T. - 4x2mm, sk. oss., no fat, no molt
Lt. cloacal protub.

Brood patch.

1637 ♀ " " 30gms. O. - 4x3mm (ova 1^{mm}), sk. oss., no fat, no molt

Martin Cr. R.S. 2060m, Humboldt Co., Nevada [T. 44N,
R. 39E, NW 1/4 sec. 24].

15 July

Imm

1638 ♂? *Passerella iliaca* no tail, sk. unoss., lt. fat, body molt

lt. fat, Brood patch, no molt.

1639 ♀ " " 29gms. O. - 6x4mm (1 yst. ovum 2mm), sk. oss.

1640 ♂ Swainson Thrush . 32gms.



R.M. Zink

1980

Catalogue

Martin Cr. R.S., 2060m, Humboldt Co., Nevada [T. 41N,
R. 39E, NW 4 sec. 24].

16 July

skeleton only

1641 ♀ *Passerella iliaca* 28gms. O-exam (post breeding), sk. oss., lt. fat

w + t. worn

1642 ♂

"

"

lt. cloacal protub. molt: inner primary

28gms. T. - 4 x 2mm, sk. oss., no fat

skeleton only

singing

w - 78mm, t - 78mm

1643 ♂

"

"

27gms. T. - exam, sk. oss., lt. fat,

1644 ♂

"

singing (weak song)

"

lt. cloacal protub. molt: inner primaries

31gms. T. - 10 x 5mm, sk. oss., no fat,

Harrison Pass R.S., 1850m, Elko Co., Nevada

17 July

coll. D.A. Good

1645 ♂

"

"

25gms. T. - 3 x 2mm, sk. oss., no fat, no molt, lt. cloacal protub.

Head of Lamoille Canyon, 2610m, 1/4 mi. S, 1 mi. E Snowflake Plk.,
Elko Co., Nevada [T. 31N, R. 58E, NE 1/4 sec. 1].

skel. only

coll. D.A. Good

w - 88mm, t - 84mm

1646 ♂

"

"

35gms. T. - 3 x 2mm, sk. oss., lt. fat

1647 ♂

"

"

30gms. T. - exam, lt. fat, sk. oss.

skel. only

w - 81mm, t - 82mm body molt

1648 ♂

"

"

32gms. T. - 2 x 1mm molt inner primaries

skel. only

w + t. worn

1649 ♂

"

"

27gms. T. - exam, lt. fat

skel. only

w - 83mm t. asymmetrical

1650 ♂

"

"

29gms. T. - 3 x 1mm, sk. oss., lt. fat

R.M. Zink

1980

(Last page for 1980)

Catalogue

$\frac{1}{4}$ mi. S, 1 mi. E Snow Flake Pk., Elko

Head of Lamoille Canyon, 2610m, Co., Nevada [T. 31N, R. 58E, NE $\frac{1}{4}$ sec. 1].

18 July

skel. only

coll. D. A. Good

1651

♀ *Passerella iliaca* 29gm. O.-exam (post-breeding), sk. oss., lt. fat
molt, old broad patch.

skel. only

coll. D. A. Good

1652

♂ Lincoln Sparrow 18gm. T. - 7x4mm, sk. oss., lt. fat
w-63mm, t-worn

coll. D. A. Good

1653

♂ *Passerella iliaca* 31gm. T. - 5x3mm, sk. oss., lt. fat

skel. only

coll. S. Kaiser

1654

♀

" " 25gm. O.-exam (post-breeding), sk. oss., lt. fat
no molt

1655

♂

"

"

27gm. T. - 2x1mm, sk. oss., lt. fat

1656

♂

"

"

30gm. T. - exam. sk. oss., no fat.

skel. only

1657

♀

"

"

29gm. O. - 4x2mm (ova 51mm), sk. oss.

skel. only

1658

♂

"

"

28gm. T. - 5x3mm, sk. oss., lt. fat

Kingston Creek, 7900ft., $\frac{1}{2}$ mi. S Kingston Cr. R. S.,

Lander Co., Nevada [T. 16N, R. 43E, S $\frac{1}{2}$ sec. 17].

19 July

1659

♂

"

"

29gm. T. - 4x2mm, lt. fat, sk. oss., lt. cloacal protub.
molt: inner primaries

1097 Creston Rd.,

Berkeley, Calif. (Alameda Co.)

15 Sept.

1660

♀

Melospiza lincolni 14gm. (dehydrated), O. - 1x1 $\frac{1}{2}$ mm
sk. unoss., lt. fat. prep. S. Kaiser

1661

Zonotrichia atricapilla specimen used for karyotype

* not saved.

R. M. Zink

1981

(1st page for 1981)

Catalogue

Chicago McCormick Place, Cook Co, Illinois

3 October 1980

skel. only

1662

♂

coll. D. Willard (FMNH orig. no. 80-546). Rec'd. at Berkeley 20 Feb. 1981

Zonotrichia albicollis 26.8 gms. T.-1mm. black+white stripes on crown. Stom.-empty. Lt. fat. No molt.

1663

♀

coll. D. Willard. (FMNH orig. no. 80-545). Rec'd. Berk. 20 Feb. 1981, Lt. fat

"
all brown crown

22.1 gms. O.-3x2mm (no follicles visible), No molt

20 October 1980

1664

♀?

coll. J. Fitzpatrick (FMNH orig. no. 80-658). rec'd. Berk. 20 Feb. 1981

" 27.2 gms. Genads not positively found, bursa 4mm tan crown, Lt. fat, no molt

1665

♀

coll. " J. Fitzpatrick (FMNH orig. no. 80-656). rec'd. Berk. 20 Feb. 1981.

27.8 gms. O.-3x2mm. Heavy fat, no molt tan crown

skel. only

1666

♀?

coll. J. Fitzpatrick (FMNH orig. no. 80-660). rec'd. Berk. 20 Feb. 1981

" mostly brown crown
bursa 5mm

23.3 gms. O.-? . bursa 5mm, stom.-empty mostly tan crown, Lt. fat, no molt

3
+3 Oct. 1980

1667

♂

coll. D. Willard (FMNH orig. no. 80-554). rec'd. Berkeley 20 Feb. 81.

Melospiza georgiana 17.2 gms. T.-1mm, no molt, Lt. fat

1668

♀?

coll. D. Willard (FMNH orig. no. 80-550). rec'd. Berkeley 20 Feb. 81

" 16.7 gms. O.-? . Lt. fat, Lt. body molt

13 Oct. 1980

1669

♂

coll. D. Willard (FMNH orig. no. 80-645). rec'd. Berk. 20 Feb. 81

" 17.0 gms. T.-1mm, Lt. fat, no molt

1670

♂

coll. D. Willard (FMNH orig. no. 80-644). rec'd. Berk. 20 Feb. 81

" 15.7 gms. T.-1mm Lt. body molt and fat

1671

♂

coll. D. Willard (FMNH orig. no. 80-646). rec'd. Berk. 20 Feb. 81

" 15.1 gms. T.-1mm Lt. fat, no molt

20 March 1980

1672

♀

coll. D. Willard (FMNH orig. no. 80-022). rec'd. Berk. 20 Feb. 81, Mol fat

Melospiza melodia 18.9 gms. O.-4x2mm (ova < 1mm)
Lt. body molt

1673

♀

coll. D. Willard (FMNH orig. no. 80-021). rec'd. Berkeley 20 Feb. 1981

" 23.3 gms. O.-6x3mm (ova < 1mm), no molt
Lt. fat

R. M. Zink

1981

Catalogue

Chicago, McCormick Place, Cook Co., Illinois

11 Oct. 1980

skel. only ♀ coll. Cliff Lemen (FMNH orig. no. 80-617). rec'd. Berkeley 20 Feb. 1981
1674 ♀ Melospiza melodia 21.9gms. O. 4x2mm, mod fat, no molt

28 Oct. 1980

" ♀ coll. D. Willard (FMNH orig. no. 80-715). rec'd. Berk. 20 Feb. 81
1675 ♀ Melospiza melodia 19.7gms. O. - 3x2mm, mod fat, no molt

" ♀ coll. D. Willard (FMNH orig. no. 80-714). rec'd. Berk. 20 Feb. 81
1676 ♀ " " 19.3gms. O. - 2x1mm (no follicles visible)
no molt; heavy fat

3 October 1980

" ♀ coll. D. Willard (FMNH orig. no. 80-548). rec'd. Berk. 20 Feb. 81
1677 ♀ Melospiza lincolni 17.6gms. O. - 2x1mm. Mod. fat, no molt

" ♂ coll. D. Willard (FMNH orig. no. 80-549). rec'd. Berk. 20 Feb. 81
1678 ♂ " " 18.7gms. T. - 1mm, mod. fat, no molt

7 October 1980

" ♂ coll. D. Willard (FMNH orig. no. 80-549). rec'd. Berk. 20 Feb. 81
1679 ♂ " " 16.0gms. T. - 1mm, Mod. fat, no molt
yellow eyes

9 October 1980

" ♀ coll. D. Willard (FMNH orig. no. 80-609). rec'd. Berk. 20 Feb. 81
1680 ♀ " " 15gms (on 20 Feb 81 - no orig. wt. taken), Mod. fat
O. - 3x1mm (follicles visible, < 1mm). No molt

20 October 1980

" ♀ coll. J. Fitzpatrick (FMNH orig. no. 80-655). rec'd. Berk. 20 Feb. 81
1681 ♀ " " 15.6gms. O. - 5x2mm (follicles visible, < 1mm)
mod. fat, Molt: tail.

NE end Tuttle Creek Lake, ft., 7 mi. SE Frankfort,
Marshall Co., Kansas.

17-21 December 1980 (killed 22 Dec. 1980)

skeleton only ♂ coll. Greg Butcher. Rec'd. Berkeley 27 Feb. 1981. wing - 86mm, tail - bent
1682 ♂ Zonotrichia querula 36gms. T. - 1mm. Heavy fat
Crown + throat $\approx \frac{1}{2}$ black



R. M. Zink
1981

Catalogue

NE end Tuttle Creek Lake, ft., 7 mi. SE Frankfort,
Marshall Co, Kansas.

- (Rec'd. Berkeley 27 Feb 1981)
(Killed 22 Dec. 1980)
- 17-21 December 1980
- skeleton only coll. Greg Butcher iris - brown. wing - 89mm, tail - 88mm
1683 ♂ *Zonotrichia querula* 36.5gms. T. - 1mm. Mod. fat.
crown - $\frac{1}{2}$ black, throat $\approx \frac{1}{6}$ black
- skeleton only coll. Greg Butcher. wing - 80mm, tail - 78mm, crown - $\frac{1}{2}$ black, throat - $\frac{1}{4}$ black
1684 ♀ " " 33.5gms. O. - 4x2mm (no apparent follicles visible)
Mod. fat.
- skeleton only coll. Greg Butcher. wing - 85mm, tail - 83mm. crown - $\frac{1}{2}$ black, throat - $\frac{1}{4}$ black.
1685 ♂ " " 37.0gms. T. - 1mm. Mod. fat.
- skeleton only coll. Greg Butcher. wing - 84mm, tail - 78mm, crown + throat mostly black.
1686 ♀ " " 31gms. O. - 3x2mm (granular(?)). Heavy fat.
- skeleton only coll. Greg Butcher. wing - 87mm, tail - 82mm, crown + throat black.
1687 ♂ " " 36.5gms. T. - 1mm. Mod. fat.
- skeleton only coll. Greg Butcher. wing - 83mm, tail - 78mm, crown + throat mostly black.
1688 ♀ " " 32.5gms. O. - 5x3mm (ova ≤ 1 mm)
- skeleton only coll. Greg Butcher. wing - 87mm, tail - 82mm. crown + throat black.
1689 ♂ " " 37.0gms. T. - 2x1mm. Mod. fat.

1981

R.M. Zink

Catalogue

Beardman Ridge, 1240m, $2\frac{1}{2}$ mi. S, $\frac{1}{2}$ mi. E Hull Mtn, Lake Co., Calif. [T. 19N, R. 10W, E $\frac{1}{2}$ sec. 23].

10 March

1690 ♀ *Cyanositta stelleri* 110gms. O. - 5×3 mm (1 got. ovum < 1 mm), sk. oss., trace fat, no molt (rectal)

1691 ♂ " " 115gms. T. - 4×2 mm, sk. oss., no fat, no molt
 $4\frac{1}{2}$ mi. S, 1 mi. E Hull Mtn, 800m, Lake Co., Calif.
[T. 19N, R. 10W, W $\frac{1}{2}$ sec. 36].

1692 ♂ *Passerella iliaca* 38.5gms. T. - 2×1 mm, sk. oss., lt. fat

1693 ♂ *Carpodacus cassinii* 24gms. T. - $2 \times 1\frac{1}{2}$ mm, sk. oss., lt. fat, no molt

11 March

coll. + prep. D.A. Good

1694 ♂ *Chamaea fasciata* 16gms. T. - 3×2 mm, sk. oss., no fat or molt

1695 ♂ *Passerella iliaca* 34gms. ^{lt. fat} T. - 1mm, sk. oss., lt. body molt

1696 ♂ Hutton Vireo 10.5gms. ^{no dorsal protub., no fat} T. - 3×2 mm, sk. oss., no molt, singing. coll. D.A. Good

1697 ♂ Bewick Wren 10gms. T. - $5 \times 3\frac{1}{2}$ mm, sk. oss., no fat, no molt

1698 ♂ Anna Hummingbird $3\frac{1}{2}$ gms. T. - 2×1 mm, no fat or molt

1699 ♀ *Carpodacus cassinii* ^{no fat or molt} 22gms. O. - 5×3 mm (ovum < 1 mm), sk. oss.

1700 ♂ ^{cf. brevicauda} *Passerella iliaca* no wt. (capture) T. - 2×1 mm, lt. fat, no molt



R.M. Zink
1981

Catalogue

4½ mi. S, 1 mi. E Hull Mtn, 800m, Lake Co, Calif. [T. 19N,
R. 10W, W½ sec. 36]

11 March

- 1701 ~~Passerella iliaca~~ DISCARDED
1701A ♂ ¹⁷⁰Colaptes auratus 5gms. T. 6x2mm, Lt. fat
1702 ♂ Chamaea fasciata 15gms. T. 5x3mm, sk. oss., no fat or molt

6 mi. S, ½ mi. E Hull Mtn, 620m, Lake Co, Calif. [T. 18N,
R. 10W, SE¼ sec. 17]

- 1703 ♂ ^{not fat}Aphelocoma caerulescens 88gms. T. 3x2mm, sk. oss.,
1704 ♀ ^{Lt. fat, Lt. body molt}Zoothera naevia 82gm. O. 6x3mm (ova minute), sk. oss
1705 ♀ ^{prop. D.A. Good... mod. fat.}Black Phoebe 19gms. O. 5x3mm (ova < 1mm), sk. oss.

12 March

- ^{cf. unalaschensis}
1706 ♀ ^{no molt, Lt. fat}Passerella iliaca 35.5gms. O. 6x3mm (ova < 1mm)
1707 ♀ ^{Lt. fat, no molt}"cf. unalaschensis 37.5gms. O. 5x3mm (ova < 1mm)

4½ mi. S, 1 mi. E Hull Mtn, 800m, Lake Co., Calif. [T. 19N,
R. 10W, W½ sec. 36]

- ^{cf. unalaschensis}
1708 ♂ Passerella iliaca no wt. (captive) T. 2x1mm. Lt. fat, no molt

- ^{cf. unalaschensis}
1709 ♂ " " no wt. (captive) T. 1mm, Lt. fat; no molt

R.M. Zink

1981

Catalogue

Calif. Acad. of Sciences, San Francisco Co., Calif.

2 April

skeleton only

1710

♂

Zonotrichia atricapilla

Body molt

34 gms. T. - 2x1mm, heavy fat

"

1711

♂

"

"

molt: body, tail.

29 gms. T. - 1mm, mod. fat, lt. body molt

"

1712

♀

"

"

Body molt

27.5 gms. O. - 3x2mm (ova < 1mm), lt. fat

"

1713

♂

"

"

29.5 gms. T. - 2x1mm, mod. fat, lt. body molt

"

1714

♀

"

"

molt: head. mod. fat

31 gms. O. - 4x3mm (ova < 1mm)

"

1715

?

"

"

31.5 gms. mod. fat, Body molt

"

1716

♀

"

"

lt. fat, molt: body

33.5 gms. O. - 4x3mm (ova < 1mm)

"

1717

♂

"

"

molt: body

32.5 gms. T. - 2x1mm, Lt. fat.

"

1718

♀?

"

"

molt: body

29 gms. mod. fat. O. - ?,

"

1719

♀

Z. leucophrys

mod. fat. no molt

27.5 gms. O. - ready to lay (1st. ovum 1mm)

"

1720

♂

"

Pug.

molt: body

20.5 gms. T. - 3x2mm, Lt. fat

"

1721

♀

"

Pug.

mod. fat; molt: body

23.5 gms O. - 4x3mm (ova < 1mm)

3 April

"

1722

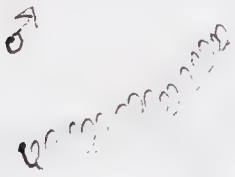
♀

"

Pug.

mod. fat; molt: body

24.5 gms. O. - 4x3mm (ova < 1mm)



R.M. Zink
1981

Catalogue

Calif. Acad. of Sciences, San Francisco Co., Calif

3 April

mod. fat, molt: body

1723 ♀ *Zonotrichia leucophrys* 25.5gms. O, - 3x2mm / ov 4/1mm

1 April

Captive

nestling - few days old

1724 *Tiaris canora* 42gms discarded

nestling - few days old.

1725 " 42gms discarded

1 mi. S Norman, Cleveland Co., Oklahoma

Birds from Doris Watt. Numbers refer to catalogue in Univ. of Ok., Museum of Zoology.

The following 27 birds died on 4 April 1981. They were captured on dates given below.

6 Nov. 1980 (died 4 April 1981)

✓ 16870 ♀ *Zonotrichia albicollis* 27gms. O. 5x3mm (ova 1mm) Heavy fat. Light body molt
sk. oss.

11 Nov.

✓ 16872 ♀ " " 31.5gms. O. 5x3mm (ova 1mm) sk. oss. Heavy fat.

13 Nov.

✓ 16871 ♀ " " 33.5gms. O. 5x3mm (ova 1mm) sk. oss.

15 Nov.

✓ 16873 ♂ " " 30.5gms. T. 1mm, sk. oss., heavy fat

✓ 16874 ♀ " " 29.5gms. O. 4x2mm (ova 1mm) sk. oss. Heavy fat, Light body molt
sk. oss.

12 Nov.

✓ 16833 ♀ *Zonotrichia querula* 40.5gms. O. 4x2mm (ova 1mm)

19 Nov.

✓ 16832 ♂ " " 40.5gms. T. 2x1mm, sk. oss. Heavy fat. Body molt

11



[Handwritten signature]

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R.M. Zink
1981

Catalogue

1 mi. S Norman, Cleveland Co, Oklahoma

Univ. of Oklahoma
Mus. of Zool. #

Killed 4 Apr. 1981 - capt. - 20 Nov. (see note on prev. page)

✓ 16841 ♀ *Zonotrichia querula* 34gms. ^{Body molt} O. - 4x2mm, sk. oss., heavy fat

✓ 16837 ♀ " " ^{Body molt. Heavy fat. sk. oss.} 32.0gms. O. - 4x2mm (ova not visible)

✓ 16834 ♀ " " 37.5gms. O. - 4x2mm (ova not visible)

✓ 16840 ♀ " " ^{Heavy fat, Light body molt, sk. oss.} 37.5gms. O. - 4x2mm (ova not vis.)

✓ 16838 ♀ " " ^{Body & tail molt, sk. oss. Heavy fat.} 35gms. O. - 4x2mm (ova not visible)

21 Nov. 1980

✓ 16839 ♀ " " ^{Body molt, 2mm anterior sk. windows, Heavy fat} 34gms. O. - 4x2mm (ova not visible)

✓ 16835 ♀ " " ^{sk. oss. Heavy fat. Body molt} 35gms. O. - 4x2mm (ova not visible)

✓ 16836 ♀ " " ^{Heavy fat. 2mm anterior skull windows} 30.5gms. O. - 4x2mm (ova not visible)

19 Nov.

skel. only
16831

♂ *Passerella iliaca* 36.5gms. ^{zaboria w-90, t-78} Tl-1mm. Body + wing molt.

skel. only
30
16832

♂ " " ^{20 Nov. zaboria w-98mm t-75mm} 34.5gms. Tl-1mm. Body + wing molt.

1 mi. W Norman, ~~28 April~~, Cleveland Co, Oklahoma

skel. only
✓ 16862

♀ *Zonotrichia leucophrys* 26.5gms. O. - 4x2mm (ova not visible)

1 mi. N Norman, ~~29 April~~, Cleveland Co, Oklahoma

skel. only
16867

♂ " " ^{29 April.} 30.5gms. T. - 3x2mm, Heavy fat

R. M. Zink
1981

Catalogue

Univ. of Oklahoma
Mus. Vert. Zool. #

mi. W Norman, Cleveland Co. Oklahoma
captured 29 Apr. 1980 (died 4 Apr. 1981)

~~16867~~ ~~Zonotrichia leucophrys 30.5 gm~~

- | | | | | | |
|---------|------------|---|-----------------------------|--------------------|---|
| ✓ 16858 | skel. only | " | " | 33 gms. | heavy fat |
| | | | 30 Apr. | (died 4 Apr. 1981) | |
| ✓ 16864 | skel. only | " | " | 36.5 gms. | heavy fat |
| ✓ 16866 | skin only | " | " | 36.5 gm. | Body molt
T. - 1mm, sk. oss., Heavy fat. |
| ✓ 16860 | skel. only | " | 2 May | (died 4 Apr. 1981) | |
| | | " | " | 32 gms. | T. - 1mm, heavy fat |
| ✓ 16859 | skin only | " | 3 May | (died 4 Apr. 1981) | |
| | | " | " | 33.5 gm | T. - 2x1mm, sk. oss.,
heavy fat, body molt |
| ✓ 16863 | skel. only | " | " | 31.5 gms. | T. - 1mm, heavy fat |
| ✓ 16849 | skel. only | " | 20 Nov. | (died 4 Apr. 1981) | |
| | | " | " | 30.5 gm. | T. - 1mm, heavy fat |
| ✓ 16848 | skel. only | " | 21 Nov. | (died 4 Apr. 1981) | |
| | | " | molt: outer 10's, 2's, body | | |
| | | " | " | 31.5 gms. | T. - 2x1mm, Heavy fat |

R.M. Zink

1981

Catalogue

Potem Creek, 1332 ft., 4 mi. E + 1 mi. S Squaw

Cr. Fire Control Station, Shasta Co., California

14 May

skeleton only

1726 ♂ *Vireo solitarius* 15.1gms. T.-6x3mm, full cloacal protub.

skel. only

singing from top dead fir. 1st year plumage

1727 ♂ *Caryodacus purpureus* 20.5gms. T.-6x4mm, full cloacal protub.
w-78mm, t-60mm

skel. only

w-65mm, t-68mm

1728 ♂ *Melospiza melodia* 22.3gms T.-10x5mm, full cloacal protub.

skel. only

1729 ♂ *Vireo solitarius* 14gms. T.-4x2mm, mod. cloacal protub.

skel. only

inc. patch

1730 ♀ *Dendroica nigrescens* 10gms. O.-6x3mm (1st. ovum 2mm),

15 May

skel. only

ad. wing + tail, sk. oss.

1731 ♂ *Empidonax difficilis* 11.5gms. T.-6x4mm. No fat or molt.

skel. only

1st year wings + tail, sk. windows 4x2mm

1732 ♂ " 10.9gms. T.-7x4mm. No fat or molt

skel. only

ad. wings + tail, sk. windows 4x2mm

1733 ♂ " 10.3gms. T.-6x4mm - No fat or molt

Squaw Cr., 1250ft 1 1/2 mi. S Squaw Cr. Fire Control Station,

Shasta Co., Calif.

skel. only

ad. wing + tail, small skull windows

1734 ♂ " 11.5gms. T.-7x4mm. No fat or molt

16 May

skel. only

ad. wings + tail

14.9, sk. oss.

1735 ♂ *Vireo solitarius* 14.9gms. T.-7x4mm, sk. oss. no fat or molt

skel. only

ad. wings + tail

15.3 sk. oss.

1736 ♂ " 15.3gms. T.-5x3mm. No fat or molt

R.M. Zink
1981

Catalogue

Squaw Cr., 1250 ft., 1½ mi. S Squaw Cr. Fire Control Station, Shasta Co., Calif.

skel. only 1737 ad. wing + tail 16 May 13.9 gms T₁-5x3mm, sk. oss. no molt or fat

skel. only 1738 ♂ Vireo huttoni 11.2 gms w-62mm, t-49mm T₁-5x3mm, sk. oss. no fat or molt

skel. only 1739 ♂ Vireo solitarius 1st yr. wing + tail 14.5 gms T₁-6x4mm, sk. oss. no fat or molt

skel. only 1740 ♂ Empidonax difficilis ad. wing + tail 10.1 gms T₁-5x3mm 3x2mm skull windows. no molt or fat.

skel. only 1741 ♂ 1st yr. wings + tail " 10.5 gms T₁-4x2mm, no fat or molt sk. windows 4x2mm

skel. only 1742 " " no fat or molt 11.9 gms T₁-4x2mm, sk. windows 3x1mm

Chirpchatte Campground along Squaw Cr., 1250 ft., ½ mi. S Squaw Cr. Fire Control Station, Shasta Co., Calif.

skel. only 1743 ♂ Empidonax difficilis 17 May ad. wing + tail 10.5 gms T₁-5x3mm sk. windows 4x2mm ("small"-WKJ)

skel. only 1744 ♂ ad. wing + tail " large sk. windows. 10.4 gms T₁-5x3mm

½ mi. W Squaw Cr. Fire Control Station, 1250 ft., Shasta Co., Calif.

skel. only 1745 ♂ Vireo solitarius 1st yr. wings + tail 14.3 gms T₁-4x2mm, sk. oss. no fat or molt

R.M. Zink
1981

Catalogue

La Salle Creek Bog, 1450 ft., Hubbard Co.,
Minnesota [T. 144N, R. 35W, SE 1/4 sec. 30]

29 May

skel. only

1751 1746 ♂ Vireo olivaceus 17.5 gm. mod. cloacal protub. T-7x5mm, lt. fat, no molt

skel. only

1751 1747 ♂ " " 16.3 gm. mod. cloacal protub. T-8x6mm, lt. fat, no molt

skel. only

1752 1748 ♂ " " 17.5 gm. mod. cloacal protub. T-8x6mm, lt. fat, no molt

skel. only

1753 1749 ♂ " " 17.5 gm. mod. cloacal protub. T-8x6mm, lt. fat, no molt

skel. only

1754 1750 ♂ Empidonax minimus singing 10.5 gm. T-5x3mm, lt. fat, no molt

skel. only

1755 1751 ♂ " singing " 11.0 gm. T-4x2mm, lt. fat, no molt

skel. only

1756 1752 ♂ " singing " 9.8 gm. T-5x3mm, lt. fat, no molt

1753 ♂

" alnorum netted 12.9 gm. T-5x3mm, lt. fat, no molt

skel. only

1757 1754 ♂ Chipping Sparrow 13.0 gm. w-70mm t-61mm T-8x6mm

30 May

skel. only

1758 1755 ♀ Vireo olivaceus 16.8 gm. no molt, mod. cloacal protub. O-8x5mm (1 yolk, ovum 2mm), mod. fat

skel. only

1759 1756 ♂ " " 17.1 gm. mod. cloacal protub. T-7x5mm, lt. fat, no molt

skel. only

1760 1757 ♂ " " 15.2 gm. full cloacal protub. T-7x5mm, not fat, no molt



R. M. Zink

1981

Catalogue

La Salle Cr. Bog, 1450ft., Hubbard Co., Minnesota
[T. 144N, R. 35W, SE $\frac{1}{4}$ sec. 31]

30 May

skel. only

1757

1758

♂

Vireo olivaceus 15.2gms. T. - 6x4mm, not fat, no molt

w-81mm, t-53mm, mod. cloacal protub.

skel. only

1758

1759

♀

"

"

16.0gms.

O. - 7x5mm (ova $\leq$ 2mm), no fat or molt

skeleton only

1719

1760

♂

Empidonax

minimus

9.8gms. T. - 6x4mm, lt. fat, no molt

singing. w -

t -

skel. only

1720

1761

♂

"

singing

"

10.0gms. T. - 6x4mm, lt. fat, no molt

skel. only

1721

1762

♂

"

singing

"

9.5gms. T. - 6x4mm

skel. only

1722

1763

♂

"

singing

"

10.0gms. T. - 6x4mm, lt. fat, no molt

skel. only

1723

1764

♂

Contopus

virens

14.0gms. T. - 6x4mm, lt. fat, no molt

w-82mm, t-64mm

skin to 1/4 minn.

no tissues. DIN

Banded - USFW, 1201-85072

(banded by Bruce A. Fall) - blue rt, green left

1765

♂

Veery

28.2gms. T. - 11x7mm, sk. oss, lt. fat, no molt

31 May
netted

no molt.

1766

♂

Empidonax

alorum

12.5gms. T. - 7x5mm, light fat, sk. oss.

no tissues

mod. cloacal protub.

1767

♂

Vermivora

chrysoptera

8.7gms. T. - 6x4mm, sk. oss, not fat, no molt

skeleton only

wing-57mm, tail-53mm

1768

♂

Geothlypis

trichas

10.1gms.

1 mi. ~~E~~ La Salle Cr. Bog, 1450ft. Hubbard Co., Minn.

skel. only

1769

1769

♀

Sphyrapicus

Broad patch

47 $\frac{1}{2}$ gms. O. - 8x6mm (194. ovum 2.5mm)

R. M. Zink
1981

Catalogue

1 mi. ^E La Salle Cr. Bog, 1450ft., Hubbard Co., ~~Ill.~~ Minn.

31 May (cont.)

skel. only

1050 1770 ♂ *Sphyrapicus varius* 48gms. T.-6x4mm

skel. only

1737 1771 ♂ ^{young} ^{adult} ^{DOR} *Cyanocitta cristata* ~~90.5~~ 90.5 gms. T.-6x5mm

1 1/2 mi. W, 1 1/2 mi. N La Salle Cr. Bog, 1450ft., Hubbard Co., Minn.

1 June

skel. only

1632 1772 ♂ *Contopus virens* 14.0gms T.-5x3mm, no fat or molt

skel. only

1773 ♂ *Vireo olivaceus* 16.5gms. T.-6x4mm, no fat or molt

1 mi. N, 1 mi. E La Salle Cr. Bog, 1450ft., Hubbard Co., Minnesota

skin + partial skel.

singing

1712 1774 ♂ *Empidonax minimus* 10.5gms. T.-6x4mm, sk. ova, not fat

skel. only

singing

1714 1775 ♂ " " 10.4gms. T.-6x4mm, lt. fat, no molt

skel. only

w-81mm t-65mm mod. fat, no molt

17067 1776 ♀ *Contopus virens* 13.8gms. O.-5x3mm (ova ≤ 1mm)

skel. only

w-82mm t-65mm

16369 1777 ♂ " " 14.2gms. T.-6x4mm, lt. fat, no molt

skel. only

w-84mm t-68mm

161655 1778 ♂ " " 15.0gms. T.-6x4mm, mod. fat, no molt

skel. only

w-83mm t-67mm

161657 1779 ♂ " " 14.0gms. T.-6x4mm, lt. fat, no molt

R.M. Zink
1981

Catalogue

1 mi. N, 1 mi. E La Salle Cr. Bog, 1450 ft., Hubbard Co.,
Minnesota

1 June (cont.)

skel. only

1780

2 none taken (1st not so late)
♂ *Sphyrapicus varius* 47.8 gms. T. - 8x5 mm, inc. patch

Lake Alice Bog, 1450 ft., Hubbard Co., Minnesota [T. 143 N,
R. 35 W, E $\frac{1}{2}$ sec. 15].

2 June

skel. only

1781

♀ *Sphyrapicus varius* 47 gms O. - 9x6 mm (1st. ovum 3 mm)

skin + partial skel.

1782

♀ *Empidonax alnorum* 13.2 gms O. - 5x3 mm (1st. ovum 1 mm - no apparent
(- gave soft, apparent 3 note call). collapsed follicles)

Sk. oss. very light fat. no molt.

2 mi. N, 1 mi. W Lake Alice Bog, 1450 ft., Hubbard Co.,
Minnesota [T. 143 N, R. 35 W, NE $\frac{1}{4}$ sec. 9].

3 June

skin + partial skel.

1783

♂ *Empidonax*

- singing a wheezy "fee-bee" (?) - definitely 2
syllables.
13.0 gms. T. - 6x4 mm, sk. oss., lt. fat, no molt

skin + partial skel.

1784

♂ *Empidonax*

- singing a wheezy "fee-bee" (?) - only 2 syllables
13.5 gms. T. - 6x4 mm, sk. oss., lt. fat
no molt.

skin + partial skel.

1785

♂ *Empidonax*

- singing a wheezy "fee-bee" (?) - only 2 syllables
12.9 gms. T. - 6x5 mm, sk. oss., lt. fat
no molt

La Salle Cr. Bog, 1450 ft., Hubbard Co., Minnesota, [T. 144 N,
R. 35 W, SE $\frac{1}{4}$ sec. 15].

skin + partial skel.

1786

♀ *Empidonax*

sk. oss. not fat. no molt.

11 gms. (captive 3 hrs.) O. - 6x3 mm (ova ≤ 1.5 mm)
- ovary apparently not post breeding
(i.e. no collapsed follicles).

$\frac{1}{2}$ mi. N, 1 mi. W Lake Alice Bog, 1450 ft., Hubbard Co., Minn.

[T. 143 N, R. 35 W, NE $\frac{1}{4}$ sec. 16].

5 June

1787

♀ *Empidonax*

sk. oss.
not fat
no molt

ovary not post-breeding. Giving a "pep" call in dense
Tamarack-Alders swamp, bordering mixed conifer. open
forest.
11.8 gms O. - 7x4 mm (1st. ovum 2 mm)



R.M. Zink
1981

Catalogue

1/2 mi. N, 1 mi. W Lake Alice Bog, 1450 ft., Hubbard Co. Minn.,
[T. 143N, R. 35W, NE 1/4 sec. 16].

5 June (cont.)

- 16886 1788 ♂ *Empidonax* skin + partial skel. 12.9 gms. T. 5x3 mm, sk. oss., not fat
no molt. sang "fee-bee-o"
- 2 note song (partial fee-bee-o?)
- 16887 1789 ♂ *Empidonax* skin + partial skel. 12.1 gms. T. 6x3 mm, sk. oss., not fat
- gave 1st part of wheezy ~~fee-bee-o~~ "fee-bee-o"
no molt

2 mi. N, 1 mi. W Lake Alice Bog, 1450 ft., Hubbard Co. Minn. [T. 143N,
R. 35W, NE 1/4 sec. 9].

- 16888 1790 ♂ *Empidonax* skin + partial skel. 13.2 gms. T. 7x4 mm, sk. oss., not fat, no molt
- 2 note song (partial fee-bee-o?)
- 16889 1791 ♂ *Empidonax* skin + partial skel. 14.3 gms. T. 8x5 mm, sk. oss., not fat
- wheezy fee-bee-o, yet ~ 2 syllables
no molt.

1.7 mi. E Lake Alice, 1450 ft., Hubbard Co. Minnesota [T. 143N, R. 34W,
SW 1/4 sec. 6].

- 16890 1792 ♂ *Empidonax* skin + partial skel. 13.5 gms. T. 6x3 mm, sk. oss., lt. fat, no molt
- not calling
- 16891 1793 ♂ *Empidonax* skin + partial skel. 13.0 gms. T. 6x3 mm, sk. oss., lt. fat, no molt
- gave 2 note song ~~fee-bee-o~~ (partial fee-bee-o?)

- 16892 1794 ♂ *Zonotrichia albicollis* skel. only - head stripes brown (except black anterior 10 mm) w - 73 mm t - 72 mm
12.7 gms. T. 8x5 mm

3 mi. W Lake Alice, 1450 ft., Hubbard Co., Minnesota
[T. 143N, R. 35W, NW 1/4 sec. 8].

7 June

- 16893 1795 ♀ *Spizella passerina* skel. only 12.8 gms. Brood patch
O. - 8x5 mm (ova ≤ 2 mm), not fat

- 16894 1796 ♀ " " 12.8 gms. Brood patch
O. - 8x5 mm (ova ≤ 2 mm), not fat

- 16895 1797 ♀ " " 12.2 gms. Brood patch
O. - 7x4 mm (ova ≤ 2 mm), not fat



R.M. Zink

1981

Catalogue

3 mi. S, 1 mi. W Felton, 1150 ft., Clay Co., Minn.

8 June

Brood patch

1724 1798 ♀ *Empidonax minimus* 10.2 gms. O. - 8x5 mm (1 gsf. ovum 3 mm)

skel. only

Lt. fat

1725 1799 ♀ " " 12.1 gms. Ovary - completely formed egg (15 x 11 mm)

2 mi. S, 2 mi. W Felton, 1150 ft., Clay Co., Minn.

skin + partial skel.

168496 1800 ♀ *Empidonax traillii* 13.2 gms. O. - 7x4 mm (1 gsf. ovum 2 mm)
- mate gave "fitz-brew" song. sk. windows 5x3 mm, lt. fat

1 mi. S, 2 mi. W Ulen, 1150 ft., Clay Co., Minnesota

9 June

skin + partial skel.

168694 1801 ♂ *Empidonax traillii* 13.6 gms. T. - 7x4 mm, sk. oss., lt. fat

skin + partial skel.

singing?! no brood patch. sk. oss. not fat

168691 1802 ♀ *Empidonax alnorum* 12.1 gms. O. - 7x4 mm (1 gsf. ovum 2 mm)
oviduct somewhat enlarged - no collapsed follicles evident
prob. mate sang "fee-bee'(-o?)?"

skel. only

168764 1803 ♂ *Melospiza georgiana* 18.2 gms. T. - 12x8 mm, lt. fat

skin + partial skel.

- gave slurred ~, but was undoubtedly bird giving fitz-brew song.

168695 1804 ♂ *Empidonax traillii* 13.2 gms. T. - 6x3 mm, sk. oss., lt. fat

3 mi. N, 1 mi. W Rothsay, 1200 ft., Wilkin Co., Minnesota

skin + partial skel.

168769 1805 ♂ *Empidonax traillii* 14.8 gms T. - 6x3 mm, sk. oss., lt. fat
- gave only call notes

skin + partial skel.

- gave only call notes

168710 1806 ♂ *Empidonax traillii* 13.8 gms, sk. oss. T. - 6x3 mm, lt. fat

R. M. Zink
1981

Catalogue

1 mi. W, 1 mi. S L Sawndale, 1200 ft., Wilkin Co.,
Minnesota

10 June 10

1807 ♀ *Empidonax minimus* 10.5 gms. well devel. incub. patch, lt. fat
O. - 7x4 mm (1 got. ovum 2 mm)
post-breeding condition ovary

1808 ♂ " singing 10.3 gms. T. - 5x3 mm, lt. fat

1809 ♂ " 10.3 gms. T. - 5x3 mm, sk. oss., lt. fat

1810 ♂ *Empidonax traillii* 14.5 gms. singing male ("Fitz-brew")
T. - 7x4 mm, sk. oss., lt. fat

1811 ♂ *Melospiza melodia* 21.8 gms. w - 67 mm, t - 70 mm, lt. fat
T. - 8x5 mm, Mod. cloacal protub.

1812 ♀ *Empidonax traillii* (?) 12.9 gms. skin + partial skel. sk. oss. Lt. fat.
O. - 7x4 mm (1 got. ovum 2 mm)
1813 ♂ *Empidonax traillii* (?) 15.5 gms. skin + partial skel. T. - 7x5 mm, sk. oss., not fat

1814 ♂ " 11 June singing 2nd half of "Fitz-brew"
14.5 gms. T. - 7x4 mm, sk. oss., lt. fat

1815 ♂ " singing "fitz-brew"
13.2 gms. T. - 7x4 mm, sk. oss., lt. fat

1816 ♂ " 12.8 gms. T. - 5x3 mm, sk. oss., lt. fat

1817 ♂ " singing "fitz-brew"
13.5 gms. T. - 7x4 mm, not fat

1818 ♀ " probable mate sang "fitz-brew". Lt. fat. No brood patch
12.4 gms. O. - 6x4 mm (1 got. ovum = 1.5 mm), sk. oss.



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Catalogue

2 mi. S, 1 mi. W Lawndale, 1200ft., Wilkin Co., Minnesota

skin + partial skel. 12 June
- prob. singing male

168706 1819 ♂ *Empidonax traillii* 13.8 gm T. - 7x4mm, sk. oss., lt. fat

+820
skin + partial skel.

168707 1820 ♀ " " prob. mated to a male singing "fitz-brew"
Sk. oss., mod. fat
14.5 gm. O. - 10x7mm (1st. ovum 6mm)
well devel. oviduct, developing inc. patch

168708 1821 ♀ " " no vocalization heard, oviduct + inc. patch not developed.
small sk. windows (3x1.5mm) posteriorly
12.2 gm. O. - 6x4mm (1st. ovum 2mm), not fat

4 mi. S Hawley, 1150ft., Clay Co., Minnesota

skin + partial skel.

- prob. mate of "fitz-brew" male

168697 1822 ♀ *Empidonax traillii* 12.2 gm. O. - 6x4mm (1st. ovum 1.5mm). Not fat
- oviduct + inc. patch barely developed, sk. oss.

3 mi. W Ulen, 1150ft., Clay Co., Minn.

13 June

singing "fitz-brew"

168692 1823 ♂ *Empidonax traillii* 12.1 gm. T. - 6x4mm

168693 1824 ♂ " " singing "fitz-brew", not fat
14.0 gm. T. - 6x4mm, sk. windows 5x3mm
molt: tail

skel. only

168694 1825 ♂ *Empidonax minimus* 10.7 gm. T. - 6x3mm

3 mi. S Waskish, 1180ft., Beltrami Co., Minn.

15 June

singing "sk. windows 4x2mm"

168695 1826 ♂ *Empidonax flaviventris* nowt. T. - 6x4mm, not fat
no molt



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1981

Catalogue

3 mi. E Waskish, 1180 ft., Beltrami Co., Minn.

specimen to U of Minn. Duluth 15 June

1827

♀

Melospiza melodia 20.3 gms. O. - Exam

specimen to U of Minn. Duluth

1828

♂

" " 23.5 mm T. - 7x4 mm

3 mi. S Waskish, 1180 ft., Beltrami Co., Minn.

16 June

skel. only

not fat, no molt

68729

1829

♀

Cyanocitta cristata 97.5 gms O. - 10x6 mm (1 gsd. ovum 2.5 mm)

specimen donated to U of Minn. Duluth

1830

♂

Zonotrichia albicollis no wt. T. - 8x5 mm

skin + partial skel

lt. fat

68661

1831

♂

Empidonax flaviventris 11.8 gms. T. - 6x4 mm, sk. windows 5x3 mm

3 mi. E Waskish, 1180 ft., Beltrami Co., Minn.

1832

♂

Empidonax flaviventris 12.0 gms. T. - 5x3 mm, sk. oss. not fat

specimen to U of Minn. Duluth

1833

♂

Oporornis agilis T. - 6x4 mm, sk. oss.

U of Minn. Duluth Field - UND 19

1834

♀

Zonotrichia albicollis 22.3 gms. O. - 8x5 mm

U of Minn. Duluth - #17

1835

♀

" " no wt. O. - 8x5 mm

skel. only

mod. active inc. patch

1836

♀

Empidonax minimus no wt. O. - Exam

U of Minn. Duluth

UND 20

1837

♂

Melospiza melodia

lu

4



R.M. Zink

1981

Catalogue

3 mi. E Waskish, 1180ft., Beltrami Co. Minn.

17 June

-giving "per-uee" call, not fat, no molt

skel. only

68657

1838

♀

Empidonax flaviventris

13.8gms. O.-shelled egg in oviduct

skin + partial skeleton

68676

1839

♂

Empidonax

alorum

singing

13.1gms. T.-7x5mm, sk. oss., not fat

skel. only

68712

1840

♂

Empidonax

minimus

singing

9.9gms. T.-5x3mm, sk. oss., not fat, no molt

17 mi. E, 2 mi. S Eveleth, 1700ft., St. Louis Co.,

Minn. [T. 57N, R. 14W, SE $\frac{1}{4}$ sec. 7].

18 June

skel. only

68692

1841

♂

Empidonax

flaviventris

singing

11.8gms. T.-6x4mm, not fat, no molt

skin + partial skel.

68694

1842

♂

"

"

singing, Lt. fat. No molt

11.5gms. T. 5x3mm, sk. windows 6x4mm

skel. only

68675

1843

♀

"

"

not fat. no molt.
12.9gms. O.-8x5mm, sk. windows

3 mi. W, 1 mi. S Sawbill Landing, 1700ft., Lake Co.,

Minnesota [T. 60N, R. 8W, NW $\frac{1}{4}$ sec. 10].

19 June

skel. only

68746

1844

♂

Vireo

olivaceus

15.5gms T.-8x6mm, sk. oss., not fat, no molt

skel. only

68670

1845

♀

Empidonax

flaviventris

sk. windows posterior, 4x2mm. not fat, no molt

10.9gms O.-7x4mm (post breeding)

skin + partial skel.

68671

1846

♂

"

"

no molt

11.2gms. T.-6x4mm, sk. oss., not fat

R.M. Zink

1981

Catalogue

1 mi. N, 5½ mi. W Sawbill Landing, 1700 ft., Lake Co.,
Minn. [T. 61 N, R. 8 W, SW¼ sec. 32].

19 June (cont.)

- 1665 skin + partial skel. 1847 ♂ *Empidonax flaviventris* 12.3 gms. T. - 6x4 mm, sk. oss., not fat no molt
- 1666 skin + partial skel. 1848 ♂ " " giving "per-wee" no molt 11.6 gms. T. - 6x4 mm, sk. ^{oss.} ~~oss.~~, not fat
- 1667 mated pair 1849 ♀ " " giving "per-wee", s/s. window not fat. no molt 13.8 gms. O. - fully formed, partially shelled, egg in oviduct. Inc. patch present
- 1668 skel. only 1850 ♂ " " singing 11.8 gms. T. - 5x3 mm, not fat, no molt
- 1669 skel. only 1851 ♂ " " singing 11.9 gms. T. - 6x4 mm, not fat, no molt

3 mi. N, 5 mi. W Sawbill Landing, 1700 ft., Lake Co.,
Minn. [T. 61 N, R. 8 W, SE¼ sec. 19].

- 1677 skin + partial skel. 1852 ♂ *Empidonax alnorum* 13.0 gms. T. - 6x4 mm, sk. oss., not fat singing "fee-bee" no molt
- 1678 skel. only 1853 ♂ *Vireo olivaceus* 17.1 gms. T. - 7x5 mm, sk. oss., not fat no molt
- 1679 skel. only 1854 ♂ " " 17.0 gms. T. - 7x5 mm, not fat, no molt

3 mi. S, 3 mi. W Sawbill Landing, 1700 ft., Lake Co., Minn.

20 June

- 16747 skel. only 1855 ♂ *Vireo olivaceus* 17.3 gms. T. - 9x6 mm
- 16748 skel. only 1856 ♂ *Sphyrapicus varius* 45.7 gms. T. - 5x3 mm, not fat, no molt Drumming. Inc. patch present



R. M. Zink

1981

Catalogue

4 mi. S, 3 mi. W Sawbill Landing, 1700 ft., Lake Co.,
Minn. [T. 60 N, R. 8 W, SW $\frac{1}{4}$ sec. 22].

20 June (cont.)

skel. only
1857

♂ *Vireo olivaceus* 17.5 gms. T. - 8x5 mm, not fat, no molt

skel. only
1858

not fat, no molt
♀ *Sphyrapicus varius* 40.8 gms. O. - 7x5 mm (fat breeding), inc. patch.

skin + partial skel.

1859

not fat
♂ *Empidonax flaviventris* 13.0 gms. T. - 6x4 mm, sk. oss.

skel. only
1860

inc. patch.
♀ *Sphyrapicus varius* 48.8 gms. O. - 8x6 mm (fat breeding)

13 mi. N, 2 $\frac{1}{2}$ mi. W Tofte, 1700 ft., Cook Co., Minn.
[T. 61 N, R. 4 W, SW $\frac{1}{4}$ sec. 18].

21 June

skin + partial skel.

singing

no molt

1861

♂ *Empidonax flaviventris* 11.5 gms. T. - 5x3 mm, sk. oss., not fat

skel. only

1862

no molt.
♂ *Vireo solitarius* 14.8 gms. T. - 4x2 mm, sk. oss., not fat

skel. only

1863

no molt. Inc. patch.
♀ " " 17.3 gms. O. - exam, sks. oss., not fat

15 $\frac{1}{2}$ mi. N, 2 mi. W Tofte, 1700 ft., Cook Co., Minn.
[T. 61 N, R. 4 W, SW $\frac{1}{4}$ sec. 5].

skel. only

1864

♂ *Vireo solitarius* 14.5 gms. T. - 4x2 mm, not fat, no molt

skel. only

1865

♂ " " 14.9 gms. T. - 4x2 mm, not fat, no molt

skel. only

1866

singing. sk. windows. Not fat. No molt
♂ *Empidonax flaviventris* 12.2 gms. T. - 5x3 mm

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1981

Catalogue

11 mi. N, 2 1/2 mi. W Tofte, 1700 ft., Cook Co., Minn.
[T. 61N, R. 4W, SW 1/4 sec. 31]

22 June

skel. only
1867 ♀ *Vireo solitarius* 17.2 gms. inc. patch, Lt. fat. no molt, sk. oss. O.-5x4mm (1st. ovum 2mm; post-laying)

skel. only
1868 ♀ " " 16.3 gms. inc. patch, No molt, Lt. fat. O.-6x4mm (1st. ovum 2mm; post-laying)

skel. only
1869 ♂ *Empidonax flaviventris* 12.5 gms. not fat. no molt. T.-5x3mm, sk. windows

3 mi. W Glenwood, 1200 ft., Pope Co., Minn. [T. 125N,
R. 38W, SW 1/4 sec. 4]

4 July

skel. only
1870 ♂ *Turdus migratorius* 29 gms. molt: inner primaries, body T.-9x5mm, sk. oss, mod. fat

7 mi. E Glenwood, 1200 ft., Pope Co., Minn. [T. 125N, R. 36W, E 1/2 sec. 5]

5 July

skel. only
1871 ♂ " " 72.5 gms T.-9x5mm, sk. oss, not fat

skel. only
1872 ♂ " " 74 gms no molt T.-9x5mm, sk. oss, not fat

skel. only
1873 ♀ *Rose-breasted Grosbeak* 44 gms. Imm. O.-3x2mm

skel. only
1874 sex? *Cyanocitta cristata* 97.5 gms. molt: body, tail, inner primaries. ~~6mm~~ not formed. sk. oss

skel. only, Imm.
1875 ♂ *Sitta carolinensis* 20 gms. T.-1mm, sk. unoss, not fat

6 July

skel. only
1876 ♂ *Cyanocitta cristata* 89.5 gms. not fat T.-4x2mm, molt: body, tail, inner primaries

skel. only
1877 ♀ " " 102 gms. inc. patch O.-exan. (1st. ovum 10mm)

R. M. Zink
1981

Catalogue

7 mi. E Glenwood, 1200 ft., Pope Co., Minn. [T. 125 N, R. 36 W, E $\frac{1}{2}$ sec. 5].

6 July

skel. only

1878 ♂ *Phaethon ludovicianus* ^{singing} 44.3 gm. T. 12x9 mm, inc. patch.

Chicago, McCormick Place, Cook Co., Illinois

Birds Received from Drs. Fitzpatrick & Willard,
Field Mus. of Nat. Hist., Chicago, Illinois.

22 May

1879

♂

Empidonax virescens

FMNH 81-196 no molt coll. J. W. Fitzpatrick
13.4 gm, T. 2x1 mm, sk. $\frac{1}{2}$ oss., mod. fat
(1st year - NKT)

1880

♂

81-197
"

Coll. J. W. Fitzpatrick
T. 3x2 mm, 16.9 gm., mod. fat, 1st-yr. skull
($\frac{1}{2}$ oss.)

28 May

1881

♂

81-232
" "

coll. D. Willard
13.3 gm. T. 2x1 mm, sk. oss., lt. fat, no molt

18 May

skel

1882

♀

Empidonax minimus

O. 5x3 mm (ova $\leq$ 1 mm)

23 May

skel.

1883

♂

Empidonax flaviventris

T. 3x2 mm

29 May

1884

♀

Empidonax traillii

81-235 NO mod. fat, no molt, 1st-yr. skull (rather unoss.)
wt. 0.6x4 mm (ova $\leq$ 1.5 mm), mod. fat

13 Oct. 1980

skel. only

1885

♂

Passerella iliaca

80-642 coll. D. Willard
38.9 gm. T. 1 mm, mod. Fat; no molt

1886

♀

80-640 coll. D. Willard

" " 33.0 gm. O. 3x1.5 mm (clear), Lt. fat no molt

R.M. Zink

1981

Catalogue

Chicago, McCormick Place, Cook Co., Illinois

skel. only
1887 ♀ ^{26 March mod} ^{81-016. coll. D. Willard, ~~fat~~ fat, no molt} *Passerella iliaca* 31.7 gms. O, - 6x4mm (ova not visible)

"
1888 ♂ ^{30 March} ^{81-028, coll. D. Willard} " " 35.2 gms. T, - 1mm, Lt. fat, no molt

prob " ^{81-027. coll. D. Willard}
1889 ♂ " " 32.8 gms. T, - 1mm, Lt. fat, no molt

"
1890 ♂ ^{81-026. coll. D. Willard} " " 38.0 gms. T, - 1mm, Mod. fat, no molt

✓ "
1891 ♀ ^{1 April} ^{81-039. D. Willard - coll.} Lt. fat, no molt
" " 31.1 gms. O, - 5x3mm (ova ≤ 1.5mm)

~~1892~~
✓ "
1892 ♂ ^{3 April} ^{81-047 coll. D. Willard} " " 35.1 gms. T, - 1mm, Lt. fat, no molt

"
1893 ♀ ^{8 April} ^{81-069. coll. D. Willard} mod. fat, no molt
" " 32.1 gms. O, - 6x4mm (ova ≤ 1.5mm)

"
1894 ♂ ^{11 April} ^{81-094. coll. D. Willard} " " 40.9 gms. T, - 2x1mm Lt. fat, no molt

"
1895 ♂ ^{8 April} ^{81-071. coll. D. Willard} *Melospiza georgiana* 16.4 gms. T, - 2x1mm

"
1896 ♂ ^{81-075. Coll. D. Willard} " " 17.4 gms. T, - 2x1mm, Mod fat, no molt

R.M. Zink

1981

Catalogue

Chicago, McCormick Place, Cook Co., Illinois

skel. only
1887 ♀ ^{26 March mod} ^{81-016. coll. D. Willard, ~~fat~~ fat, no molt} *Passerella iliaca* 31.7 gms. O, - 6x4mm (ova not visible)

1888 ♂ ^{30 March} ^{81-028, coll. D. Willard} 35.2 gms. T, - 1mm, Lt. fat, no molt

1889 ♂ ^{81-027. coll. D. Willard} 32.8 gms. T, - 1mm, Lt. fat, no molt

1890 ♂ ^{81-026. coll. D. Willard} 38.0 gms. T, - 1mm, Mod. fat, no molt

1891 ♀ ^{1 April} ^{81-039. D. Willard - coll. Lt. fat, no molt} 31.1 gms. O, - 5x3mm (ova ≤ 1.5mm)

1892 ♂ ^{3 April} ^{81-047 coll. D. Willard} 35.1 gms. T, - 1mm, Lt. fat no molt

1893 ♀ ^{8 April} ^{81-069. coll. D. Willard mod. fat - no molt} 32.1 gms. O, - 6x4mm (ova ≤ 1.5mm)

1894 ♂ ^{11 April} ^{81-094. coll. D. Willard} 40.9 gms. T, - 2x1mm Lt. fat no molt

1895 ♂ ^{8 April} ^{81-071. coll. D. Willard} *Melospiza georgiana* 16.4 gms. T, - 2x1mm

1896 ♂ ^{81-075. Coll. D. Willard} 17.4 gms. T, - 2x1mm, Mod fat. no molt



R. M. Zink
1981

Catalogue

Chicago, McCormick Place, Cook Co. Illinois

22 April

skel. only

81-106. coll. J. Fitzpatrick, ~~mod.~~ fat, no molt

1897

♀ *Melospiza georgiana* 17.1 gms. O.-5x3mm (ova < 1mm)

"

81-107. coll. J. Fitzpatrick

1898

♂

"

"

16.0 gms. T.-2x1mm, Lt. fat, no molt

"

81-105. coll. J. Fitzpatrick

1899

♂

"

"

17.1 gms. T.-2x1mm, mod. fat; no molt

"

24 April

81-111. coll. D. Willard

molt: tail

1900

♂

"

"

15.1 gms. T.-3x2mm, Lt. fat

"

30 April

81-116. coll. J. Fitzpatrick.

1901

♀

"

"

15.4 gms. O.-5x3mm (ova ≤ 1mm)

"

81-117. coll. J. Fitzpatrick. Lt. fat. No molt

1902

♂

"

"

16.1 gms. T.-4x2mm, Lt. fat, no molt

"

4 May

81-140. coll. J. Fitzpatrick. mod. fat, no molt

1903

♀

"

"

16.7 gms. O.-3x2mm (ova < 1mm)

"

81-138. coll. J. Fitzpatrick mod. fat. NO molt

1904

♀

"

"

16.5 gms. O.-6x4mm (ova ≤ 1mm)

Thornton State Beach, Daly City, O m, San Mateo Co., California

15 June

almost

Not fat. Found dead on beach.

469

skin + partial skel.

1905

♂

Aethia

pusilla

55 gms.

(emaciated), T.-4x2mm, no molt

Tissues + Mallophaga preserved.
pres. to Stephen F. Bailey by Peninsula Humane
Society, San Mateo, California.

R. M. Zink
1981

Catalogue

1 mi. S, $\frac{1}{4}$ mi. W Pinnacle Rock, 1150m, Lake Co.,
Calif. [T. 15N, R. 8W, NW $\frac{1}{4}$ sec. 21].

3 Nov.

possibly sent
to Field
museum

1906 ♀ *Junco hyemalis* no wt. O. - 4x2mm (ovulating), sk. oss., lt. fat

skel. only

coll. J. A. Marten, w-84mm, t-46mm

1907 ♀ *Sitta carolinensis* 17gms. O. - 2x1mm (not devel.)

skel. only

coll. J. A. Marten. Ad. plumage

1908 ♀? *Regulus satrapa* 5.5gms. O. - ?, not fat, no molt

prep. + coll. J. A. Marten. Lt. body molt

✓ 1909 ♂ *Picoides pubescens* 28.5gms. T. = 1mm, not fat

2 mi. N, 1 mi. E Pinnacle Rock, 1350m, Lake Co.,

Calif. [T. 15N, R. 8W, NE $\frac{1}{4}$ sec. 16].

skel. only

coll. J. A. Marten. w-80mm, t-87mm

✓ 1910 ♀? *Passerella iliaca* 36gms. O. - ?

skel. only

w-77, t-73mm

1911

"

"

34.5gms. O. - 4x2mm (ovulating), ~~mod.~~ mod. fat

skel. only

1912

♀ *Chamaea fasciata* 13.8gms. O. - 3x2mm (ovulating)

1913

♀ *Myadestes townsendi* 38.5gms. O. - 6x3mm (ovulating) sk. oss., lt. fat, no molt

3 mi. N, 2 $\frac{1}{4}$ mi. E Pinnacle Rock, 3000 ft, Lake Co., Calif.

[T. 16N, R. 8W, ^{NW} $\frac{1}{4}$ sec. 35].

4 Nov.

skel. only

coll. J. A. Marten. no molt

✓ 1914 ♀ *Myadestes townsendi* 32gms. O. - 4x2mm (ovulating), not fat

coll. J. A. Marten

✓ 1915 ♀ *Thryomanes bewickii* 8gms. O. - 4x2mm (ovulating), sk. oss.

R. M. Zink
1981

Catalogue

old
Museum

7 3 mi. N, 2 1/4 mi. E Pinnacle Rock, 3000 ft, Lake Co.,
Calif. [T. 16N, R. 8W, NW 1/4 sec. 35].

4 Nov.

skel. only
1916

♂ *Catharus guttatus* 25 gm. T. 1.5 mm
coll. J. A. Marten, W - 87 mm

1917 ♀

Toxostoma redivivum 95 gm. O. - 6 x 3 mm (ova tiny)
coll. J. A. Marten. Sk. windows, not fat

1918 ♀

"

mod. fat, No molt.
" ~108 gm. O. - 6 x 3 mm (ova not visible)

✓ 1919

♂

Sphyrapicus varius ~51 gm. T. - 1 mm
prep. & coll. Jill A. Marten

1920

♀

Zonotrichia atricapilla 30 gm. O. - 3 x 1 1/2 mm, sk. 2/3 unoss.
lt. fat no molt

1921

♂

Parus inornatus no wt. T. - 1 mm, sk. oss., not fat, no molt

skel. only

1922

♂

Regulus calendula 6 gm. T. - 1 mm
coll. J. A. Marten

skel. only

1923

♀

"

"

5.8 gm. O. - 2 x 1 mm

skel. only

1924

♂

Pipilo erythrophthalmus 43.5 gm. T. - 1 mm
coll. J. A. Marten. no fat, no molt

✓ skel. only

1925

♀

Carpodacus

W - 75 mm

21 gm. O. - 9 mm.

skel. only sex

1926

?

Cyanocitta stelleri 109 gm.

skel. only

1927

♂

Chamaea fasciata 15 gm. T. - 1 mm (black)

R. M. Zink

1981

Catalogue

1/2 mi. N, 4 1/2 mi. W Goat Mtn., 2800 ft., Lake Co., Calif. [T. 16 N, R. 8 W, NW 1/4 sec. 6].

5 Nov.

skel. only

coll. J. A. Marten

1928 ♂ *Chamaea fasciata* 16 gms. T. - 1mm, not fat, no molt.

skel. only

1929 ♂ *Passerella iliaca* 31.5 gms. T. - 1mm, mod. fat, no molt

skel. only

1930 ♂ " " 35 gms. T. - 1mm, mod. fat, no molt

1931 ♀ *Junco hyemalis* 18.5 gms. O. - 3 x 2 mm (ovating), sk. ova. Lt. fat. No molt.

skel. only

Imm. plumage

1932 ♀ *Zonotrichia atricapilla* 32 gms. O. - 2 x 1 mm. Mod. fat. No molt

1933 ♂ *Zoothera ~~naevia~~ naevia* 71 gms. T. - 1.5 mm, lt. fat. sk. windows anterior

1/2 mi. N, 1 mi. W Red Rock, 3700 ft., Lake Co., Calif. [T. 16 N, R. 9 W, NE 1/4 sec. 22].

1934 ♀ *Melanerpes formicivorus* 87 gms. (ova 51) 0.6 x 3 mm light fat light body molt.

1935 ♀ *Aphelocoma coerulescens* 83 gms. O. 8 x 5 mm (ova 1 mm) coll. J. A. Marten no molt, no fat sk. ova.

skel. only

coll. J. A. Marten

1936 ♀ *Parus gambeli* 10.8 gms. O - 3 x 2 mm no molt, no fat

skel. only

coll. J. A. Marten, Imm. plumage

1937 ♂ *Zonotrichia atricapilla* 30.5 gms. T. - 1mm, ~~mod.~~ mod. fat, no molt

R. m. Zink
1982

Catalogue

Middle Canyon, 800 ft., Santa Catalina Island,
Los Angeles Co., California

12 May

comp. skel.
+
tissues

1938 ♂ *Empidonax difficilis* 10.8 gms. T.-6x4 mm, lt. fat, no molt

" 1939 ♂ " " 10.4 gms. T.-5x3 mm, lt. fat, no molt

" 1940 ♂ " " 11.2 gms. T.-6x4 mm, lt. fat, no molt

045 " 1941 ♀ " " active inc. patch. lt. fat, no molt
10.8 gms. O.-7x4 mm (lgst. ovum 3 mm)

" 1942 ♂ " " 11.5 gms. T.-5x3 mm, slt. fat, no molt

" 1943 ♀ *Thryomanes bewickii* lt. fat, no molt
11.6 gms. O.-6x3 mm (ova $\leq$ 2 mm)

13 May

047 " 1944 ♂ *Empidonax difficilis* 10.5 gms. T.-6x4 mm, sl. fat, no molt

048 " 1945 ♀ " " inc. patch not well devel.
10.8 gms. O.-6x3 mm (lgst. ovum 2.5 mm)

049 " 1946 ♀ " " lt. fat, no molt, lt. inc. patch
11.0 gms. O.-6x4 mm (lgst. ovum 2 mm)

050 " 1947 ♀ " " lt. fat, inc. patch developing
14.0 gms. O.-laying cond., lgst. ovum 14 mm

051 " 1948 ♀ " " inc. patch not devel., oviduct devel.
12.5 gms. O.-8x5 mm (lgst. ovum 4 mm)

052 " 1949 ♂ " " coll. J. A. Marten
10.0 gms. T.-5x4 mm, slt. fat



R.M. Zink
1982

Catalogue

Santa Catalina Island, 400ft. Middle Canyon, Los Angeles Co., Calif.

13 May

comp. skel.
+ tissues

1950 ♂ *Empidonax difficilis* 10.5gms. T.-6x4mm, lt. fat, no molt

" 1951 ♂ *Contopus sordidulus* 14.0gms. T.-3x2mm, mod. fat

" 1952 ♂ *Vireo huttoni* 10.0gms. T.-3x2mm, sl. fat

Mt. Orizaba, 2000ft., Santa Catalina Island, Los Angeles Co., California

14 May

" 1953 ♂ *Eremophila alpestris* 28.2gms. T.-8x5mm, Lt. fat, mod. cloacal protub. no molt

" 1954 ♀ " " well devel. inc. patch. Lt. fat, no molt
24.7gms. O.-8x5mm (lgt. ovum 2.5mm)

" 1955 ♀ " " well devel. inc. patch. Lt. fat, no molt
26.0gms. O.-8x4mm (lgt. ovum 2.5mm)

" 1956 ♂ " " mod. cloacal protub.
26.8gms. T.-9x6mm. Lt. fat, no molt

SE end Carrizo Plain, 2500ft., San Luis Obispo Co., California

15 May

" 1957 ♂ *Eremophila alpestris* 29gms. T.-10x5mm full cloacal protub.

" 1958 ♂ " " full cloacal protub.
26gms T.-8x5mm, no fat, no molt

" 1959 ♂ " " full cloacal protub.
27gms T.-9x6mm, no fat, no molt

R.M. Zink
1992

Catalogue

SE end Carrizo Plain, 2500 ft, San Luis Obispo
Co., California

15 May (con't.)

comp. skel.

tissues 1960

mod. active inc. patch

♀ *Eremophila alpestris* 34.2gms. O. - egg (20x14mm) in oviduct.

1961

♂

"

"

full cloacal protub., no molt
28gms. T. - 11x5mm, no fat

1962

♂

"

"

cloacal protub., slt. fat, no molt
29.5gms. T. - exam (breeding cond.)

1963

♀

"

"

27.0gms. O. - 8x4mm (1st. ovum 2mm)

1964

♂

"

"

full cloacal protub., no fat, no molt
27.5gms. T. - 8x4mm

1965

♂

"

"

full cloacal protub.
27.5gms. T. - 7x4mm, no fat, no molt

1966

♂

"

"

full cloacal protub.
29.0gms. T. - 8x4mm, no fat, no molt

1967

♀

"

"

slt. fat
26.0gms. O. - 8x3mm (1st. ova 1mm)

1968

♂

"

"

cloacal protub.
26.0gms. T. - 9x6mm, slt. fat, no molt

1969

♂

"

"

full cloacal protub.
29.5gms. T. - 8x5mm, no fat, no molt

1970

♂

"

"

full cloacal protub.
28.0gms. T. - 9x6mm, no fat, no molt

1971

♂

"

"

full cloacal protub.
27.5gms. T. - 6x4mm, no fat, no molt

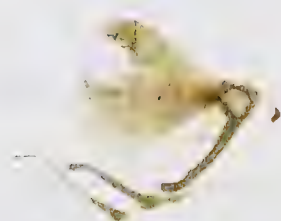
1972

♂

"

"

full cloacal protub.
26.0gms. T. - 7x5mm, no fat, no molt



R.M. Zink

1982

Catalogue

SE end Carrizo Plain, 2500ft., San Luis Obispo Co., California

15 May (con't.)

comp. skel.

tissues

1973

♀ *Eremophila*

alpestris

active inc. patch, trace fat

32gms. O.-fully formed egg in oviduct (+ 8mm orange ovum & 2 coll. follicles).

169676

"

1974

♂

"

"

full cloacal protub., no molt

28.5gms. T.-7x5mm, slt. fat

169077

"

1975

♂

"

"

full cloacal protub., no molt

29.2gms. T.-8x5mm, slt. fat

"

1976

♂

"

"

small cloacal protub.

32.2gms. T.-8x5mm

"

1977

♂

"

"

full cloacal protub.

30.5gms. T.-7x5mm, lt. fat, no molt

"

1978

♀

"

"

active inc. patch

32.6gms. O.-fully formed egg in oviduct; no coll. follicles

Wells Ranch, 2400ft., N foothills Caliente Range, San Luis Obispo Co., California

2300ft

16 May

1097

"

1979

♂

Amphispiza belli

15.8gms.

full cloacal protub.

T.-7x5mm, lt. fat, no molt

"

1980

♂

"

"

full cloacal protub.

16.2gms. T.-7x5mm, ~~lt.~~ lt. fat

"

1981

♂

"

"

17.1gms. T.-7x5mm, lt. fat

" 1982

♂

Chondestes grammacus

full cloacal protub.

32.0gms. T.-8x5mm, lt. fat, no molt

"

1983

♂

"

"

31.0gms. T.-8x5mm, lt. fat, no molt

R. M. Zink
1982

Catalogue

Wells Ranch, 2400 ft., N foothills Caliente Range,
San Luis Obispo Co., California

16 May (cont.)

comp. skel.
tissues 1984 ♀ *Tyrannus verticalis* 42.8gms. O₁-196. ovum 8mm
mod. active inc. patch, et. fat

" 1985 ♂ " " 38.5gms. T₁-10x6mm, et. fat

" 1986 ♂ *Spinus lawrencei* 11.2gms. T₁-4x2mm, et. fat

R.M. Zink

1982

Catalogue

700ft,

1/2 mi. N, 2 mi. W Wilburton, Latimer Co., Oklahoma

[T.5N, R.18E, SE 1/4 sec. 1]

1 June

skel. tissues 1987 ♀ *Melanerpes carolinus* 75gms. O-8x5mm (lgst. ovum 3mm)
devel. inc. patch, Lt. fat, no molt

2 June

" 1988 ♂ *Parus carolinensis* 10.5gms. T-1mm, not fat
sk. unoss.

" 1989 ♀ " " 9.8gms O-2.5 x 1.0 mm, not fat
not granular
sk. unoss.

" 1990 ♂ *Vireo olivaceus* 15.8gms. T-6.0mm x 4.0mm, Lt. fat
mod. cloacal protub.
sk. oss. prep. D.J. Watt

" 1991 ♀ *Cardinalis cardinalis* 38gms. O-2.0 x 1.0 mm
iris-16, brown. not granular
sk. unoss. Lt. fat, wing molt
prep. D.J. Watt

skin tissues 1992 ♂ *Passerina ciris* 16.2gms. T-6.0 x 4.0 mm
skull oss. fat light - light body molt (on neck).

3 June

skel. tissues 1993 ♂ *Tyrannus tyrannus* 36gms. T-7x5mm, Lt. fat, no molt

skel. tissues 1994 ♂ " " 37.2gms. T-6x4mm, Lt. fat, no molt

" 1995 ♂ *Muscivora forficata* 43.8gms. T-10x5mm, not fat, no molt

skel. tissues 1996 ♂ *Sitta carolinensis* 18.9gms. T-1mm (black), sk. unoss.
Lt. fat, prep. Doris J. Watt

R.M. Zink

1982

Catalogue

4 mi. NE Stigler, 650ft., Haskell Co., Oklahoma
[T. 10 N, R. 21 E, sec. 35]

3 June (cont.)

skel. + tissues 1997 ♂ *Myiarchus crinitus* 34gms. T.-8x6mm, Lt. fat, no molt
(2 nunc tubes) Prep. Doris J. Watt

" 1998 ♂ *Parus bicolor* 23gms. T.-6x4mm, sk. ova, no molt
no fat

4 June

" 1999 ♂ *Tyrannus tyrannus* 40.5 gms. T.-6x4mm, ad. skull, no fat
no molt

" 2000 ♂ *Eremophila alpestris* 32.5 gms. T.-5x3mm, mod. cloacal protub.,
skull fully ossified. Lt. fat. no molt wing chord 102mm. mod. cloacal protub.

prep. Doris J. Watt

" 2001 ♂ *Tyrannus tyrannus* 43gms. T.-5x3mm, no molt, ad. sk.

" 2002 ♂ *Spiza americana* 29.6gms. T.-8x6mm, sk. ova.
mod. cloacal protub. no molt, Lt. fat

" 2003 ♂ *Chondestes grammacus* 29.1gms. T.-12x7mm. no fat
full cloacal protuberance mod. cloacal protub. no molt
skull fully ossified

" 2004 ♂ *Ammodramus saviannarum* 17.3gms. T.-6x4mm
skull fully ossified, no molt, Lt. fat mod. cloacal protub.

" 2005 ♂ " " 17.5gms. T.-7x5mm sk. ova.
mod. cloacal protub., Lt. fat, no molt

skin + tissues 2006 ♂ *Muscivora forficata* 41.2gms. T.-12x5mm
no apparent inc. patch. No molt
- no colored crown feathers. wing - 120mm
- outer retrices = 138mm - v. worn

skel. + tissues 2007 ♀ " " 45gms. O.-breeding - lgt. ovum 9mm
2 nunc tubes slight inc. patch, Lt. fat, no molt
sk. ova.

R.M. Zink

1982

Catalogue

6 mi. N, 1 mi. W McCurtain, 480ft. Haskell Co.,
Oklahoma [T. 9N, R. 22E, NE 1/4 sec. 20]

5 June

- skel.
tissues 2008 ♀ *Myiarchus crinitus* 33.8gms. O.-examined. ad. skull
no molt
- " 2009 ♀ *Sayornis phoebe* 20gms. O.-6x4mm (ova 1mm). ad. skull
active inc. patch, lt. fat, no molt
- " 2010 ♂ " " 21gms. T.-5x3mm, ad. skull, no molt
no fat
- " 2011 ♂ " " 20gms. T.-5x3mm, ad. skull, no molt
no fat
- " 2012 ♂ *Cardinalis cardinalis* 41.5gms. T.-6x4mm, sk. oss. no fat
lt. cloacal protub. No molt
- skin
tissues 2013 ♂ *Dryocopus pileatus* T-2.5mm x 1.0mm. No wt.
3 hunc tubes bursa = 10mm. Molt: body, inner primary, tail
prep. Doris J. Watt & R.M. Zink
- skel. + tissues only
2014 ♂ *Parus bicolor* 24gms. T.-4x3mm
Badly* shot damaged - specimen discarded
- skel. + tissues
" 2015 ♂ " " 20.8gms T.-1mm, sk. unoss, lt. fat, no molt
no molt
- " 2016 ♂ *Vireo griseus* 10.1gms. T.-~~1mm~~ 5x3, lt. cloacal protub.
sk. oss., no molt, no fat
- " 2017 ♂ *Sialia sialis* 30.5gms. T.-7x5mm, sk. oss., no fat, no molt
- 1/2 mi. W Bokoshe, LeFlore Co., Oklahoma

6 June

tissues only
2018

♂ *Toxostoma rufum*
DOR

specimen discarded
68.5gms. T.-exam

* blown to shit



R.M. Zink

1982

Catalogue

4 mi. N McCurtain, 500ft., Haskell Co., Oklahoma
[T. 9N, R. 22E, sec. 28].

6 June

skel. + tissues 2019 ♂ *Sitta carolinensis* lt. fat prep. Doris J. Watt
20.1 gms. T. - 1mm, sk. unoss.

" 2020 ♂ *Eremophila alpestris* wing - 101mm, tail - 68mm, sk. oss.
33 gms. T. - 8x5mm, no molt
lt. fat, lt. cloacal protub.

Sans Bois Creek, 450 ft., Haskell Co., Oklahoma
[T. 8N, R. 22E, NE 1/4 sec. 5].

7 June

skel. + tissues 2021 ♂ *Archilochus colubris* 2.5 gms. T. - 2x1mm, no fat, no molt

skin + tissues 2022 ♀ *Empidonax virescens* on nest + eggs when collected, no molt
13.8 gms. O. - 6x4mm (ova ≤ 2 mm), ad. skull
lt. fat, Nest 15 ft. in Iowa branches of *Quercus*
rubra in floodplain forest

skel. + tissues 2023 ♂ " " ad. skull
12.9 gms. T. - 4x2mm, no fat, no molt

skin + tissues 2024 ♂ " " ad. skull
13 gms. T. - 4x2mm, no fat, no molt

skel. + tissues 2025 ♂ *Mniotilta varia* 11.1 gms. Molt: body, secondaries
T. - 1mm, sk. unoss. lt. fat
prep. D.J. Watt

skel. + tissues 2026 ♀ *Contopus virens* 13.1 gms. no molt, no alt. indub. patch
O. - 4x2mm (ova ≤ 1 mm), ad. skull
prep. D.J. Watt

8 June

skin + tissues 2027 ♂ *Empidonax virescens* 11.8 gms. T. - 3x2mm, ad. skull, no molt
no fat, lt. cloacal protub.

skel. + tissues 2028 ♂ *Vireo olivaceus* 17.5 gms. singing, no molt, no fat
T. - 6x4mm, sk. oss.
prep. D.W. Watt

R. M. Zink

1982

Catalogue

Sans Bois Creek, 450ft. Haskell Co. Oklahoma

[T. 8N, R. 22E, NE 1/4 sec. 5]

9 June

skel.

tissues 2029

♂ *Empidonax virescens*

prep. Doris S. Watt

14 gms. T. - 5 x 3 mm, ad. skull
lt. cloacal protub. no molt

" 2030

♂

"

"

prep. Doris S. Watt

13.1 gms. T. - 5 x 3 mm, ad. skull
lt. cloacal protub. no fat, no molt

" 2031

♂

"

"

12.9 gms. T. - 5 x 3 mm, ad. skull
lt. cloacal protub. no fat, no molt

" 2032

♀

"

"

active inc. patch, no fat, no molt

12.9 gms. O. - 8 x 5 mm (ova 1 line,
post-laying)

" 2033

♂

"

"

no fat, no molt

12.5 gms. T. - 6 x 4 mm, lt. cloacal
protub.

" 2034

♀

"

"

prep. Doris S. Watt, no molt, lt. fat

14.2 gms. O. - 8 x 4 mm (1 gdt
active inc. patch. ova 1 line - post
laying)

" 2035

♀

Myiarchus crinitus

no molt, no fat, ad. skull

27.7 gms. O. - 6 x 3 mm (ova 1 line -
no apparent inc. patch. prob. parasite damage
to ovary)

" 2036

Imm.

♂

Picoides

pubescens

prep. Doris S. Watt, molt, body

24.5 gms. T. - 2 x 1 mm, no fat

" 2037

Ad.

♂

Archilochus colubris

2.1 gms. T. - 3 x 2 mm, no fat, no molt

" 2038

♂

Poliotila

caerulea

no fat, no molt
6.1 gms. T. - 5 x 3 mm, sk. oss.

" 2039

Imm.

♀

Geococcyx californianus

2 nunc tubes

iris yellow, bare skin around eye light blue
skin back side of head orange. No wt, Lt. fat
legs + feet light blue-gray, toe pads light tan
molt: body, wing, tail, stom. - mostly grasshoppers
O. - 5 x 3 mm (not developed).



R. M. Zink

1982

Catalogue

7 mi. SE Vian, 500ft., Sequoyah Co., Oklahoma [T. 11 N, R. 23 E, NW 4 sec. 28].

14 ~~June~~ June

skel. + tissues 2040 ♂ *Passerina cyanea* 12.9gms. T. - 9x5mm, not fat ^{singing}

" 2041 ♀ *Vireo belli* ^{- with singing male} O. - 4x3mm ^{Wts. on specimen}

" 2042 ♂ *Spizella pusilla* T. - 5x3mm "

" 2043 ♂ *Myiarchus crinitus* T. - 5x3mm "

" 2044 ♂ *Charadrius vociferus* 84.5gms. T. - 5x3mm ^{2 nunc tubes}

" 2045 ♀ *Toxostoma rufum* 85.2gms. O. - 4x3mm (ova 4/11-)

" 2046 ^{Imm} ♀ *Spizella pusilla* 12.6gms O. - 2x1mm ^(no heart)

5 mi. W Round Mtn., 500ft., McIntosh Co., Oklahoma
[T. 11 N, R. 19 E, E 1/2 sec. 14].

15 June

" 2047 ♂ *Sturnella magna* no wt. T. - 7x5mm, not fat ^{no molt.}
^{2 nunc tubes}

" 2048 ♂ *Agelaius phoeniceus* 60.3gms. T. - 10x7mm, not fat ^{prep. Doris J. Watt}

" 2049 ♂ *Zenaidura macroura* T. - 12x7mm, no wt. ^{- incubating. molt: body, tail}
^{2 nunc tubes}

" 2050 ^{Imm} ♀ *Mimus polyglottos* 46.5gms. O. - 2x1mm, slt. fat ^{prep. Doris J. Watt}

" 2051 ^{Imm} ♂ " " 56.5gms. T. - 1mm, lt. fat ^{prep. Doris J. Watt}

End of OK. collection

the
1912

R. M. Zink

1982

Catalogue

Boulder Creek Campground, 4800 ft., 4 mi. S, 1 1/2 mi. E

30 June

skel. + tissues

Trapper ^{Peak} Creek, Ravalli Co., Montana

2052 ♂ *Vireo solitarius* ^{singing} 14.9 gms. T. - 5x3mm, not fat. no molt

Little West Fork Bitterroot River, 4800 ft., 1 1/2 mi. W, 7 1/2 mi.

S Trapper Peak, Ravalli Co., Montana

1 July

" 2053 ♂ *Vireo solitarius* 15.0 gms. T. 5x3mm, not fat. no molt

" 2054 ♂ *Sphyrapicus varius* 44.8 gms. T. 3x2mm. Lt. fat. no molt

" 2055 ♂ *Empidonax hammondi* 10.0 gms. T. 4x2mm. Lt. fat. ^{no molt}

3/4 mi. N, 4 mi. E Trapper Peak, 1650m, Ravalli Co.

Montana [T. 2N, R. 21W, SW 1/4 sec. 28]

2 July

skel. 2056 ♂ *Vireo solitarius* 15.3 gms. T. 5x3mm. not fat. no molt

" 2057 ♂ " " 14.0 gms. T. 5x3mm, not fat. Lt. cloacal protub. Head blown apart!

" 2058 ♂ *Empidonax hammondi* 11.8 gms. T. 4x2mm Lt. fat. no molt

" 2059 ♂ *Sphyrapicus varius* 48.5 gms. T. 2x1mm Lt. fat. no molt.

2060 ♂ *Empidonax hammondi* 11.5 gms. T. 5x2.5mm, no molt Lt. fat.

2061 ♀ *Vireo solitarius* 15.2 gms. O. 6x4mm (ova ≤ 2mm) Lt. fat. no molt. - head blown off! Site. inc. patch, mate of R22066

2062 ♂ *Stellula calliope* 2.1 gms. T. 2x1mm, no molt. not fat - shot during display flight

R.M. Zink

1982

Catalogue

3/4 mi. N, 4 mi. E Trapper Peak, 1650m, Ravalli Co., Montana

[T. 2N, R. 21W, SW 1/4 sec. 28]

2 July (cont.)

skel. + tissues 2063 ♀ *Sphyrapicus thyroideus* 51.5 gms. O, - 8x5mm (post-laying)
- inc. patch part. developed, Lt. fat
wing - 130mm, tail - 76mm

22 " 2064 ♂ " " 53.5 gms. T, - 4x2mm
- inc. patch part. devel. not fat. no molt
wing - 133mm, tail - 76mm

3 July

24 " 2065 ♂ *Vireo solitarius* 13.7 gms. mod. cloacal protub. T, - 5x3mm. Not fat. no molt

26 " 2066 ♂ " " "camp bird + mate of RMZ 2061
14.0 gms. T, - 5x3mm, slt. fat, no molt
- not fat. no molt

29 " 2067 ♀ *Pheucticus melanocephalus* 51 gms. O, - 9x6mm (post-laying; ova 2mm)
- devel. inc. patch, Lt. fat

29 " 2068 ♂ *Vireo solitarius* no wt. - molt tail, slt. fat
T, - 6x4mm, slt. ass. Lt. cloacal protub.

29 " 2069 ♂ *Empidonax hammondi* Lt. cloacal protub. No molt
10.1 gms. T, - 5x3mm. Not fat

29 " 2070 ♂ " " mod. cloacal protub. slt. fat
10.6 gms. T, - 5x3mm

29 " 2071 ♂ " " mod. cloacal protub.
9.9 gms. T, - 6x3mm. slt. fat. no molt

29 " 2072 ♂ " " Lt. cloacal protub. Molt: inner primaries
10.5 gms. T, - 6x3mm. Not fat

168970 " 2073 ♂ " " mod. cloacal protub. No molt
10.1 gms. T, - 5x3mm. Not fat

168971 " 2074 ♂ " " 10.4 gms. T, - 5x3mm. Lt. fat. no molt

R.M. Zink
1982

Catalogue

$\frac{3}{4}$ mi. N, 4 mi. E Trapper Peak, 1650m, Ravalli Co., Montana
[T. 2N, R. 21W, SW $\frac{1}{4}$ sec. 28].

3 July (cont).

1875
skel. + tissues 2075 ♂ *Empidonax* ~~chrysolaus~~ Lt. body molt
13.2gms. T. - 7x4mm, Lt. fat

202 " 2076 ♂ *Spizella passerina* 12.1gms. T. - 10x5mm, slt. fat, no molt

$\frac{3}{4}$ mi. S, 4 mi. E Trapper Peak, 1650m, Ravalli Co.,
Montana [T. 2N, R. 21W, SE $\frac{1}{4}$ sec. 33].

4 July

187 " 2077 ♂ *Vireo solitarius* 14.0gms. T. - 5x3mm. Lt. cloacal protub.
not fat. no molt

187 " 2078 ♂ " " 13.8gms. T. - 5x3mm, Lt. cloacal protub.
slt. fat. no molt

1972 " 2079 ♀ *Empidonax* ~~chrysolaus~~ - devel. inc. patch. Lt. fat. no molt
10.2gms. O. - 6x4mm (ova ≤ 1.5 mm)

1979 " 2080 ♂ *Vireo solitarius* 15.4gms. T. - 2x1mm (!), slt. cloacal protub.
Lt. fat. no molt

1979 " 2081 ♂ " " 14.6gms. T. - 5x3mm, no molt
Lt. fat. Lt. cloacal protub.

1905 " 2082 ♂ *Hesperiphona vespertina* 51.5gms. T. - 11x7mm
wing (chord) - 91mm, tail - 61mm
not fat. no molt, Lt. cloacal protub.

$\frac{3}{4}$ mi. S, 2 $\frac{1}{2}$ mi. W Doran Pt., 1590m, Ravalli Co.,
Montana [T. 2N, R. 20W, SE $\frac{1}{4}$ sec. 9].
Lt. fat. no molt

" 2083 ♂ *Vireo solitarius* 15.9gms. T. - 6x3.5mm, slt. cloacal protub.

1974 " 2084 ♂ " " 15.2gms. T. - 5x3mm. Lt. cloacal protub.
Lt. fat. no molt



R. M. Zink

1982

Catalogue

$\frac{3}{4}$ mi. S, $2\frac{1}{2}$ mi. W Doran Pt., 1590m, Ravalli Co.,
Montana [T. 2N, R. 20W, SE $\frac{1}{4}$ sec. 9].

5 July

skel. +
tissues

2085

♂ Empidonax hammondi

Not fat. No molt.
10.8 gms. T. - 6×3 mm. Lt. cloacal protub.

" 2086

♂ Vireo solitarius

s/t. fat. No molt
13.9 gms. T. - 5×3 mm, s/t. cloacal protub.

" 2087

♂

"

"

- s/t. fat. No molt
13.5 gms. T. - 4×2.5 mm, s/t. cloacal protub.

" 2088

♀

1 $\frac{1}{2}$ " "white beard-like" sub-ventral
line suggested, but not quite round?

mated
pair

- inc. patch not fully developed. s/t. fat
15.1 gms. O. - 7×4 mm (lgt. ovum 2 mm. post-
no molt laying; 3 (?) collapsed foll.)

" 2089

♂

"

"

- partly devel. inc. patch? s/t. fat. No molt
15.1 gms. T. - 5×3 mm, Lt. inc. patch

" 2090

♀

"

"

- inc. patch not fully devel. s/t. fat. No molt
15.3 gms. O. - 6×4 mm (ova ≤ 1.5 mm; post-laying)

" 2091

♂ Empidonax hammondi

molt: inner primaries, not fat
10.6 gms. T. - 5×3 mm, s/t. cloacal protub.
prob. mate of RmZ 2093

" 2092

♂ Passerina amoena

- $\approx$ full cloacal protub. wing chord 73 mm. Tail - ~~52~~ 57 mm
14.2 gms.

" 2093

♀ Empidonax hammondi

prob. mate of RmZ 2091. ~~not~~ s/t. fat
9.9 gms. O. - 8×4 mm (lgt. ovum 1.5 mm)
no molt. inc. patch not fully devel.

" 2094

♀ Spizella passerina

w. chord - 68 mm, tail 58 mm. Lt. fat
13.8 gms. O. - 7×4 mm (ova ≤ 2 mm)
no molt. inc. patch $\frac{1}{2}$ devel.

$10\frac{1}{2}$ mi. N, $1\frac{1}{4}$ mi. E Trapper Peak, 1710m, Ravalli Co.,
Montana

" 2095

mated ♀ Vireo solitarius

- inc. patch not fully devel.
18.5 gms. O. - 14×10 mm (lgt. ovum 8 mm, next
lgt. " 5 mm)

" 2096

pair ♂

"

15.9 gms. T. - 6×4 mm, Lt. cloacal protub.



R.M. Zink

1982

Catalogue

10½ mi. N, 1¼ mi. E Trapper Peak, 1710m, Ravalli Co.,
Montana [T. 3N, R. 22W, NE¼ sec. 1].

5 July (cont.)

skel. +
tissues

check patch ~ dull brown

- mod. devel. inc. patch, w - 86mm

2097 ♀ *Carpodacus cassinii* 27.8gms. O - 8x4mm (lgst. ovum 2mm)
tail - 59mm

Rock Creek, 1410m, 12½ mi. N, 3½ mi. E Trapper Peak,
Ravalli Co. Montana [T. 4N, R. 21W, SW¼ sec. 28].

6 July

- inc. patch reduced. Body molt, inner primaries

2098 ♂ *Sphyrapicus varius* 51.8gms. T - 2.5x1.5mm, slt. fat

"

- old inc. patch, slt. fat. no molt

2099 ♀ 43.2gms. O - 6x4mm (ova ≤ 1mm)

mated
pair

- taken at nest hole - young present

- inc. patch (old)

2100 ♂ 45.5gms. T - 3x2mm, not fat. no molt

2 none taken

no molt. Lt. inc. patch

2101 ♂ 43.0gms T - 4x2mm, slt. fat.

prob.
mates

- taken at nest hole - young present, Lt fat

2102 ♀ 40.8gms. O - 7x5mm (ova ≤ 1mm. post-laying)

- near male singing a clear "fitz'-bew", Active inc. patch.

2103 ♀ *Empidonax* 12.2gms. O - 7x4mm (lgst. ovum 1.5mm; post-laying)
slt. fat. No molt

1mi. N North Fork,

Lemhi Co., Idaho

2104 ♂ *Pica pica* no wt. DOR T - 3x1mm. slt. fat. Molt.

10mi. S Challis,

Custer Co., Idaho

2105 ♀ *Chordeiles minor* DOR 68gms O - 8x5mm (ova ≤ 2mm; oviduct enlarged)

end of Montana Trip

R. M. Zink

1982

Catalogue

^{.8}
~~2.8~~ km NW Quatro Cruces, 40 m, Prov. Puntarenas,
Costa Rica

skel. + tissues

25 August

2106 ♂ *Arremonops conirostris* 26.5 gms. T. - 8 x 5 mm

skel. + tissues

2107 ♀ ~~Myiophobus~~ *Myiophobus viridiventer* no wt.

skel. + tissues

2108 *Tolmomyias sulphureus* no wt.

